HYSTERIA

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NERVOUS AND MENTAL DISEASE MONOGRAPH SERIES NO. 44

HYSTERIA

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NERVOUS AND MENTAL DISEASE PUBLISHING CO.

NEW YORK AND WASHINGTON

1926

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1926

PREFACE

The present work is not a special clinical treatise on hysteria. We will not describe its symptom complexes, diagnosis, and treatment. On the contrary, we plan to investigate the hysterical reaction type as a psychological and neurophysiological problem, and, perhaps, will place it in a larger biological category. The often very interesting details on the physiology of the reflexes and vegetative nervous system will be touched upon only as briefly as the text will permit.

We have attempted to correlate the most fundamental ideas in modern research on hysteria, especially those of Kräpelin and Freud, with the results of our own observations. With certain limitations and supplements, large fragments were borrowed from the following contributions: "Die Gesetze der Willkürlichen Reflexverstärkung" and "Die Willensapparate des Hysterischen," belonging to my earlier work on the theory of hysteria. Other ideas are connected with certain things mentioned in my book on medical psychology,[1] to which the present work is supplementary. In that book, one will also find, briefly summarized, practical conclusions for the expert opinion and treatment of hysteria.

It must be emphasized that our presentation is entirely built upon clinical experience which indicates that hysterical manifestations are predominantly vague, impulsive ways of reaction occurring in simple, primitive, or immature persons, and appear relatively seldom in enigmatic, highly differentiated personalities possessing intricate richness of experience. We will avoid going into the various derivative interpretations which the word "hysterical" has by degrees acquired in belletristic, journalistic, and popular language, and which frequently have only a loose or

[1] Medizinische Psychologie, Leipzig, Thieme, 2 Aufl., 1922.

distorted relationship to its original clinical meaning. In such usage, it often has a sharp moral accent which savors of ill-breeding, the effeminate, or the disgustingly theatrical and exaggerated expression of affect. On the other hand, the hysterical woman, even in her banal and impassive moments, has a hidden and fascinating attractiveness to the phantasy of the aesthete; yes, even for that of the highly gifted poet, in whom she stimulates marvelous dreams. The bizarre capriciousness of an immature, semi-childish eroticism and its impulsive hysterical effusions are phantastically transformed into a well known literary figure, the " mystery woman " (dunkle Weib), with her enigmatical disposition. Here only the striking exterior comes from what is hysterical, all else from the poet.

Still another variant in the everyday use of the word " hysterical " will not be considered, because the type of neurotic personality which it implies merely touches upon the periphery of our field of clinical experience; this is the so-called " parasitic character " with its noisy, make-believe feelings and quackish gestures, that type of spineless person who seeks to forget his emptiness in ever anew adopted parts, and is nowadays falsely called hysterical. " Within the rich cloak of irresponsible emotions, there lies nothingness " (Jaspers). The essential point about this form does not rest in the reaction type which is medically known as " hysterical," but in the sociological conduct alluded to above.

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INTRODUCTION

The modern theory of hysteria started at that point where one began to be convinced that hysteria is not simply a clinical syndrome, which like internal disorders can be described and circumscribed according to individual symptoms and stigmata, but that *hysteria is a form of reaction.* In 1902, Hoche maintained that hysteria was not a disease-picture, but a special form of psychic disposition. He likewise formulated the idea that, with an experience of ample severity, everyone was capable of hysteria. These views were elaborated with perfect clarity by Gaupp,[1] when he said: "Hysteria is an abnormal way of reacting to the demands of life." In part, even before this knowledge was gained and hand in hand with it, one by degrees clearly recognized that hysteria, including its physical manifestations, is something psychogenic, determined by affect and suggestive idea; that hysteria is a psychic form of reaction. The way for this knowledge was already prepared by experience which showed that hypnosis and suggestion could influence the symptoms, and, in particular, by a demonstration of the individual psychic connections of hysterical physical symptoms (Studies in Hysteria, by Breuer and Freud).

Although the view that hysteria is a psychogenic reaction-type[2] has nowadays received pretty general recognition, we are still very undecided as to a more accurate description of the hysterical type as opposed to other psychogenic reaction-types. At this point,

[1] Gaupp, Ueber den Begriff Hysterie. Zeitschr. f. d. ges. Neur. u. Ps., 5, 1911.

[2] From a purely clinical standpoint, there is also much that would oppose this formulation, although in general it is undoubtedly correct. The severe degenerative hysterias could with perfect right be called endogenous disorders, in so far as the abnormal constitutional background is by far the most important thing, and the external psychic stimuli are only chance or accidental causes, changeable symptom-builders, just as in many schizophrenias.

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we will by degrees clearly elaborate upon two important sides which have been taken upon the nature of hysteria. Both extend over purely clinical into general psychological or biological questions. The clinical term, hysteria, clings to a certain nucleus of symptom groups: the convulsive attacks, the stupor forms and twilight states, the tremors and tic-like twitchings, the paralyses and muscle spasms, the sensory anesthesias and hyperesthesias, as well as certain manifestations of irritation and paralysis in the reflex and vegetative apparatus, all, in so far as they are initiated through psychic pathways. About this clinical nucleus are grouped, in rather loose fashion, less precise clinical pictures which now are added to hysteria, in the narrower sense, and again are separated from it.

One line of development taken by the ever advancing conception of hysteria, other than its purely clinical description, has approximately the following general trend: the hysterical symptoms *are ontogenetically preformed types of reaction arising from the impulsive, psychic subsoil.*[3] They lie prepared in every person. This trend of thought, in different variations and formulations, can be found on the one hand in the psychoanalytic school of Freud, on the other, emanating from the Darwinian theory of affectivity, in Kräpelin's theory of hysteria, which Mörchen[4] and others resolutely followed in their conception of the war hysterias.

The other main trend of the theory of hysteria has elaborated the viewpoint that to the hysterical symptom pictures cling a purpose, a " will to sickness," a " flight into sickness," " an advantage by sickness," " a sham," a " defect in the perception of health." Bonhöffer[5] formulates this definition very clearly, when

[3] The knowledge of the development of hysterical symptoms from the ontogenetic substrata of the psyche already paved its way into literature through the idea of dissociation in the unconscious, the connections of hysteria with suggestive and hypnotic phenomena, and in the parallels of child psychology.

[4] Ztschr. f. d. ges. Neur. u. Ps., 44, 1919.

[5] Allg. Ztschr. f. Ps., 68, 1911.

he says: the shining through of a definite volitional trend in the manifestations of the disorder is what impresses one as characteristic of hysteria. This conception has received wide support from the accumulated material of the war and the "damage suit" hysterias. Also in psychoanalytic literature, we hear of the purposeful in the neurosis, the "gain through sickness," which is spread over the narrower theory of hysteria.

Both these conceptions of hysteria,[6] superficially considered, have no point of contact with one another. But it is noteworthy that the large majority of clinical pictures, conventionally termed hysteria, fall equally well into both definitions. They are obviously just as purposeful as, on the other hand, they do not usually elaborate themselves in optional, arbitrarily devised deceptions; but act in firm, precise, biological radicals: the hypnoid, the stupor, the spasm and tremor mechanisms, or other reflex and semi-reflex processes. In radicals, then, which by themselves are not characteristic of hysteria, but which have their family ties and analogous forms in the most diverse spheres of life's healthy and unhealthy manifestations, in catatonia, in increased forms of normal affective expression, yes, even in the simplest, instinctive reactions of the lower animals.

How does it occur that the majority of hysterical pictures are at once expedient and biologically preformed? Well then, if certain of the nucleus groups of hysteria can really be traced back to old instinctive mechanisms, why should they not be expedient? Do we not find advantageous adaptation to and defense against the external irritants of life in just such instinctive expediencies? And if then, a person seeks adaptation and defense against the external irritants of life and is unable to

[6] Another trend attempts to build up the conception of hysteria on the "Hysterical character." This appears to be less advisable, because different personality types which cannot be well brought together into a uniform picture are about equally disposed to the hysterical reactions; but above everything, because for many hysterical reactions not characterology, but the effects of an experience and the environment are the main thing.

procure them through the usual paths of sensible deliberation and volitional activity, ought he not then regress with his strivings, first of all to those old pathways which are offered him by his hereditary instincts? Naturally the utilization of such older pathways will, in part, be possible only with those modifications and probably circuitous routes which the complicated mechanisms of higher psychic life make necessary. The reaction as a rule will not come about purely instinctively, as among the lower animals, but through the intricate coöperation of rational, instinctive, and reflex mechanisms.

One will almost hit upon the core of our present conception of hysteria when one states that *such psychogenic reaction-forms are predominately called hysterical, where a tendency to dissimulation makes use of reflex, instinctive, or otherwise biologically preformed mechanisms.*

The important idea about a type is that it possesses a firm center, but not hard and fast boundaries. Types, as a rule, can only be determined intrinsically; we cannot mark their boundaries. By " type," we mean a nucleus of more distinct and among themselves quite similar formations which have been deliberately lifted out from a sea of progressive transitions. This holds good for an anthropological racial type as well as a personality type, or a clinical reaction-type. One should not, therefore, desire to sharply limit the hysterical reaction-type by means of definitions, otherwise one will always cut through something alive.

We do not ask: where does the hysterical reaction-type have its boundary lines, but rather: where are its confines? The most important confines are located where the two main stipulations of this type do not cover each other any more; consequently, where a desire to be ill glimmers through without essentially availing itself of preformed mechanisms; on the other hand, where in psychogenic reactions the same preformed mechanisms appear as in hysteria, but without apparent aim.

The first is true of the freely improvised aggravations and

simulations which through wide transitions are connected with the hysterical reactions by means of the hysterical habit-formations; to a certain degree also of the " damage suit " neuroses of civil life, which are markedly purposeful often in the presence of very vague symptomatology, without all the precise hysterical reflex and instinct mechanisms. In certain acute fright and panic syndromes, we observe, for example, mechanisms which are wholly related to hysteria: stupor forms, convulsions, hypnoid states, affective reflex-radiations, but we do not always clearly see a purpose in them, or, at all events, a more elementary, more direct, affective purpose, as in the ordinary hysterias. They also do not allow themselves to be in every way sharply separated from the domain of hysteria, but undoubtedly stand near its border. In both the " damage suit " as well as the fright neuroses, the clinical terminology is notoriously unsettled, and some classify them with hysteria, while others do not.

In the following pages, we will attempt to present the problem of hysteria from a standpoint which will work the two main contentions harmoniously together, and above all, its relations to the impulsive and instinctive life; in the second part, we will investigate by what special ways psychic aims in man avail themselves of the old, preformed mechanisms.

PART I

Hysteria, Instinct, and Impulse

CHAPTER I

The Violent-Motor-Reaction[1] and the Sham-Death-Reflex

A girl, who is faced with an undesirable marriage, may avoid it in two ways. She will either proceed with scheme and deliberation, making the most of her opponent's weak points—now energetically resistive, and again cleverly elusive, until by selective, newly adapted action and speech which take account of every turn in the situation, she finally reaches her goal. On the other hand, she may some day suddenly fall down, twitch, tremble, struggle, strike convulsively, and throw herself about, repeating this so long and frequently until she eludes the obnoxious suitor—Let us take two soldiers who are not equal to the terrors of war. One will consider his beautiful handwriting, his technical capabilities, and his connections at home; he will weigh the pros and cons of the situation, take a hundred clever steps, and will finally land in a peaceful office. Some fine morning, after a severe bombardment, the other is met aimlessly running back and forth in the trenches; he is taken away, breaks out into severe shaking and trembling, comes to a neuropsychiatric station, and from here is sent to garrison duty in an office, where he meets his clever comrade in the act of writing.

These are two solutions of a given situation. The first is almost entirely characteristic of the human race. The second is a characteristic biological reaction, which runs through the entire animal series from the unicellular organisms up to man. If a

[1] Bewegungssturm.

swimming infusorian[2] approaches a zone of heated water, it reacts with an overproduction of lively motions, which continue until one of them takes it away from the dangerous area, whereupon it quietly swims off. If a bee or a bird is caught in a room, it will neither sit in one corner and deliberate nor will it methodically examine the doors and windows for an opening, but, instinctively directed toward luminosity will release a violence of sprawling, fluttering, aimless to and fro jerky motions which are spasmodically repeated, until one of them by chance carries it through an open window into freedom, whereupon the usual peaceful motions of flying at once reoccur.

In living beings, "*the tantrum violent-motor-reaction*" is a typical reaction to situations which menace or impede the course of life; it is a spontaneous reaction of relative biological adaptation. Successively, all the movements that the individual is capable of are rapidly set into action, and steadfastly repeat themselves in whirling motions. Should one of these many irregular motions by chance separate the animal from the zone of danger, this single motion will be continued with a speedy resumption of quietness. The object of the "violent-motor-reaction" is to enable the organism to make a rapid selection of that motion, among the many at its disposal, which will adequately meet the situation at hand; this is done without deliberation, by an almost purely mechanical or, at most, a vague, general, affect-driven play of motions. Being an instinctive reaction which expires quite schematically and without adaptation to the individual situation, it may, of course, often aimlessly puff away or even become directly harmful.

In the course of evolution, the "violent-motor-reaction" as a biological defense reaction steps more and more into the background. More recent and, as a rule, even more expedient formations cover over the older reaction type. In dogs and very plainly

[2] Jennings, Contributions to the Study of the Behavior of Lower Organisms. Carnegie Institute, Washington, 1904.

in apes,[3] the incipience of systematic search and deliberation, of a quieter, less motor type, can be observed. In adult human beings, selective voluntary action is the chief reaction type to new situations; they will only react with "violent-motor-reactions" under definite conditions. In other words: The "*act of trying*" is by degrees displaced from without to within, from peripheral motility into the central nervous system, from the scale of motions to the scale of motor nuclei.

Now, under what conditions in human biology do we find the "violent-motor-reaction" as a type of response to external stimuli? First of all in *panic,* from the effect of oversevere, shocking experience. Such experiences momentarily paralyze the higher psychic functions; and, being a phylogenetically older adaptive mechanism, the "violent-motor-reaction" comes once more into activity by stepping automatically into their place. In an earthquake catastrophe,[4] a crowd of people will behave just like our imprisoned bird. Among other things, there appear a violence of "headless" hyperkinesias: screaming, trembling, convulsions, twitchings, running this way and that. If among the many motions initiated, there is one which by chance will take the person away from the sphere of tumbling houses, quiet ensues; then, as in the case of our bird or infusorian, the "violent-motor-reaction" has attained its regulative aim.

In children, the "violent-motor-reaction" has still further application. Instead of the deliberative speech and deportment of adults, a rude pushing, screaming, sprawling about, and aimless striking often appear in reaction to painful stimuli.

Between these two groups, panic and childish behavior, are inserted the hysterical hyperkinesias: the hysterical attack, the violent emotional attacks, the twilight-like running away, and the

[3] W. Köhler, Intelligenzprüfungen am Menschenaffen. Berlin, Springer. English translation. Harcourt, Brace & Co., New York.

[4] E. Stierlin, Über die medizinischen Folgezustände der Katastrophe von Courrières. Berlin, Karger.

tremor and convulsive paroxysms which then frequently fix themselves into periodic repetitions or chronic abortive forms—the latter, as we will see later, under the influence of fixative, secondary factors. In so far as it releases pell-mell a veritable fireworks of all conceivable reflex and voluntary motions and gestures, the hysterical attack represents an excellent example of an atavistic "violent-motor-reaction."

On the one hand, the hysterical "violent-motor-reactions" without limitation pass over into the acute fright, anxiety, and panic syndromes; on the other, they have wide transitional relations with the normal affective paroxysms of the child. The angry screaming and kicking of the healthy child, the increased, purposeful, affective explosions of the poorly brought up and neurotic child—with cyanosis, clouding of consciousness, and a suggestion of convulsive character; and, finally the hysterical attacks of youthful, infantile, undeveloped women and mental defectives—charged with rude expression of affect, form a homogeneous series of psychomotor phenomena, which in the main differ only quantitatively. And, in like manner, the foundations for the fright reactions, occurring in many war hysterias and transiently in normal persons, arose from the motor forms of expression for fright and anxiety.

The hysterical "violent-motor-reaction" has the following aspects in common with related manifestations in the animal series, in the child, and in panic:

1. The "violent-motor-reaction" is an instinctive *defense reaction against disturbing external stimuli.*

2. It consists of an *overproduction of aimless motions.*

3. It arises, as far as the psychic manifestations are concerned, not from clear deliberation, but from *a tense, diffuse, affective condition,* which involuntarily expels the explosions of motion.

4. In the "violent-motor-reaction," there is, indeed, no inherent deliberation, but there is an *aim,*—a vague, impetuous striving to get away from the zone of danger.

5. In animals as well as in hysterical persons, the effect of the "violent-motor-reaction" is frequently such that its purpose of removing the disturbance will actually be *realized.*

6. So far, it represents a mechanism of *relative biological adaptation.*

The hysterical reactions readily allow themselves to be considered outside of the viewpoint, "sick" or "healthy," and where the higher pathways for some reason or other are inaccessible, they frequently represent a utilization of old, dormant pathways.

In the War, they frequently served as a kind of safety-valve against psychic overstrain in persons with weakly resistive constitutions who were thus withdrawn from molestations which they were mentally unable to tolerate. In adults, they represent an abnormality, in so far as they no longer are pathways which are commonly used, but largely appear with experiences of injurious overseverity or in persons with inferior, immature constitutions; and in so far as they tend to enlarge into injurious disorders of the psychic apparatus.

The hysterical reaction represents a lower[5] type, while selective voluntary action represents a higher[6] type of reaction. From a painful stimulus over a diffuse, idea-poor affective tension, the lower type is directly conducted into a motor discharge, which, being phylogenetically preformed, ensues in a firmly fixed, mechanical fashion, without special adaptation to the individual situation. While, from a painful stimulus over an emotionally stressed ideational series with intrapsychic sifting of the motor impulses, the higher type leads to a previously selected series of movements, adapted to the situation. Hence, *the hysterical reaction is related to the normal human reaction as instinct is to*

[5] Sometimes higher—as seen in "Hunger Strikes," "Revolutions" and similar activities when conservatism becomes too strongly entrenched.—(Editors.)

[6] Vice versa, sometimes lower when seeking lower aims, rationalized as higher as in many smug social attitudes.—(Editors.)

intellect. The higher and lower types may lead to the same result —freedom from a disturbing situation. The upper type is not always the most adaptive. The hysterical reaction, like an instinct, sometimes attains its goal more directly than the intellect. And like the former, it acts blindly, vigorously, and with an end in view.

By instincts, we generally understand a " legacy of patterns of behavior which are ready for use " (Bühler). The instinctive reaction possesses a certain summarized adaptation, but (in contradistinction to a rational, volitional action) is inflexible, formal, stamped into a firm pattern, and is not adapted to the individual situation. The subjective state of affairs in consciousness during the activities of a human instinct, *e.g.,* danger to life, is that of a diffuse, idea-poor, affective condition, which directly radiates without suitable deliberation into a motor attitude. For us, " instinct " is always the opposite of " rational," of what comprises the higher psychic attainments of reflective intellect and suitably contemplated volitional action. The words " instinctive " and " rational " make the relationship between certain forms of hysterical reaction and the normal human reaction much clearer than the opposites: " conscious " and " unconscious." To be sure, we must not go so far as to maintain that in man also these phylogenetically preformed mechanisms, throughout, run off purely instinctively. In the hysterical group, we more often find a characteristic combination of rational and instinctive motives.

Another large circle of widely spread instinctive reactions, occurring in animals, group themselves around the so-called " *sham-death-reflex* " or " immobilization reflex," which has close relationship to cataleptic and hypnotic phenomena.[7] This reflex shows all transitions from the simple act of hiding, wedging the

[7] Mangold, Hypnose und Katalepsie bei Tieren. Jena, Fischer, 1914. Babak, Bemerkungen über die Hypnose, den Immobilisations—oder Sichtotstellen-Reflex, den Schock und den Schlaf der Fische. Arch. f. d. ges. Physiol., Pflüger, 166, 203, 1917.

body between stones, or crawling into the sand, up to what is essentially hypnoidal. Babak, who has done much research on fish (Callichthys, Corydoras, and Anabas scandens) sketches the process as follows: If startled, the animal almost instantly changes from a black to a whitish or reddish color, rapidly moves his pectoral fins, and instead of fleeing, throws himself upon one side and remains in that position for some time. In addition, there appears a certain amount of rigidity; the fins are spread; the gill movements cease for some time, and later the respiratory periodicity appears weak. On its back and somewhat inclined sidewards, the animal may remain motionless for a quarter of an hour or more. At times, one will observe rolling movements of the large eyes, seldom a violent twitching motion of the gill apparatus. Neither by rapid movements of the hand near the large eyes, nor by shaking or gentle contact are we able to awaken the animal. To arouse it, one must often shake the animal more strongly or push it further under the water, whereupon at times, the normal swimming movements will immediately follow; but occasionally the animal will then spontaneously relapse into the hypnoidal state once more or even repeatedly, and will only fully awaken after a strong stimulus has been applied.

Related conditions may be traced and studied all through the animal series: in insects and spiders, crabs, snakes, chickens and horses.

In animals, these conditions exhibit the following characteristics in detail: partial loss of reaction to outer sensory stimuli and, in particular, a well marked analgesia. In the musculature, aside from immobility, there appear either relaxation or beautiful cataleptic conditions with increased tension, cerea flexibilitas, etc. Tremors may also be observed. Such reactions may at times continue as long as 24 hours.

After the very careful investigations of Mangold, we are justified in considering these animal conditions as essentially iden-

tical—physiologically speaking[8]—with human hypnosis; and they are not only identical with experimental hypnosis, but also with closely related spontaneous hypnoid processes: the stupors and twilight states in fright and hysteria. Furthermore, in animals, we discover this same double appearance of hypnoid states. On the one hand, it occurs experimentally, on the other, under natural conditions of life and especially with affective circumstances which at times are analogous to human affect. It is of further significance that this " animal hypnosis " prefers the same situations around which hysterical reactions in man most frequently group themselves—danger to life and the business of reproduction. The " sham-death-reflex "—the occurrence of motor rigidity with threatening danger—is undeniably an adaptive arrangement in a number of animals; and is a natural defense reflex, which must be of special use to animals without very agile locomotion, because it withdraws them from the discovery of a pursuer, or makes them undesirable to the beast of prey, which often will only pursue prey in flight and will avoid that which is immobile. In some animals, as for example the walking stick *(Dixippus),* catalepsy (in conjunction with a change of color) is built up into a fully developed means of protection. In the service of reproduction, we see reflex immobility in chickens and very nicely in *Galeodes.* In the latter, copulation begins when the small, physically weaker male suddenly springs upon the female with astounding rapidity and impetus, and grasps her in the dorsal region. As though by magic the female snaps into a rigid, contracted position in which she remains passive, immobile, and entirely without resistance.

[8] Referring to the different nature of psychological processes in man (rapport relation, etc.) some have declined a comparison of both spheres. But such biological investigations can only be built up fundamentally by a comparison of such living processes which are common to a greater part of the animal series. That, with the richer psychic life of man, a biological radical like the hypnoid must psychologically be of more intricate development, is quite clear. Although a fish does not compose poems, when he loves; yet, no one will doubt the essential likeness of the animal and human sexual impulse.

Under experimental conditions, this reflex occurs only in sexually mature females, and will otherwise fail. Here also, one gains the impression that the rigidity, occurring with the violent attack, proceeds from a sort of shock which resembles that in fright.

Let us compare the hypnoid cataleptic phenomena in the animal series with corresponding conditions in man when they appear in reaction to the same stimuli: danger and erotic shock. They fall largely into the realm of hysteria and the emotional reactions related to it. Corresponding with the complexity of the human psyche, they are more manifoldly developed without there being any change in the sensory-motor fundamental complex or in the intrinsic biological radical. They are variations built upon the same theme. Furthermore, a richer development of dramatic inner experiences and dreamlike, ideational elements is what differentiates the human hypnoidal states from the animal ones; in many hysterical "twilight states," these may mask and strongly modify the fundamental sensory-motor complex.

In man, one finds very pretty motor rigidities and stupors which are caused by acute fright, and which may often open out through wide transitions into the realm of hysteria; or may from the very beginning have a hysterical character. Among other things, Stierlin relates the following about the Messina earthquake: "On the third story, a woman remained in her bed for 72 hours. During all this time, she was in a state of muteness and immobility, although, she could have easily saved herself. Her child had died in the meantime." In the human fright psychoses and fright hysterias, the twilight state is just as frequent as the stupor, and, with or without simultaneous motor connections, embodies especially the sensory side of the "sham-death-reflex," the blocking of physical and psychic external stimuli, the hypnoid sleepy-dreamlike state of consciousness, and may actually go into the reactive somnolent states, or narcolepsy. Both manifestations, the cataleptic stupor and the hypnoid twilight state, as reactions to fright and other affective stimuli, are closely

related and frequently combined in human hysteria; just as there are all degrees of transitional and mixed forms from the more inhibited twilight states and the agitated twilight states up to the "violent-motor-reactions" of the hysterical attack, the tremor neuroses, etc. Finally, let us recall the well known tendency of experimental hypnosis to go over into hysterical twilight states which often disturb a lay or medical hypnosis, and wherein the inner relationship between human hypnosis and the hysterical hypnoid is betrayed.

There is a tendency in hysteria to fall back repeatedly, without a new cause, into the reaction once set loose by an acute affective stimulus. This peculiarity, in part, has a parallel in the "sham-death-reflex" of animals. Babak says: "Here and there, with similar spontaneity, the animal once more falls back into the hypnoidal state, even repeats it, and will only completely awaken after a violent stimulus has been applied." Word for word, one could transfer this description to many of the war neuroses, where most of the acute fright reactions rapidly disappeared, while some always repeated their stupor or twilight state, and only after more intense stimulation (the Kauffmann therapy) could be completely awakened.

There is still another group of circumscribed hysterical manifestations which in part, at least, show obvious relationship to the "sham-death-reflex." Kleist[9] writes, referring to his observations on the fright psychoses or hysterias: "It is particularly instructive to follow the regressive formation of the general stupors. One very often observes an awkwardness of gait, a paralysis of an arm, and often—and this rather frequently—manifold difficulties of speech which all continue for some time, and which appear as remnants of a general psychogenic motor inhibition. Other physical signs of hysteria, with striking intensity, are regularly found in conditions of stupor. Of two cases of hysterical blindness which I have seen, one was a stupor case. There was a high

[9] Kleist, Schreckpsychosen. Allg. Ztschr. f. Psychiatr., 74, 1918.

degree of concentric narrowing of the visual field in case 20. Hysterical analgesias are quite common. Upon a more or less serious injury to the tympanum and inner ear, may be engrafted hysterical deafness or difficulty in hearing." These observations are quite correct. In my own cases, for example, I frequently found the following typical dissolution-scale: (1) general stupor; (2) hysterical muteness or deaf-mutism; (3) hysterical stammering, and from here, by degrees or by active therapy, a transition into recovery. Aside from deaf mutism, many forms of hysterical anesthesia and visual disturbances (in the sensory field), and the spasms, flaccid paralyses, and disturbances of gait (in the motor field), are certainly to be interpreted as abortive or residual forms of the stuporous-hypnoid syndrome—of the "sham-death-reflex." One will doubtless venture to assume: that such neurologically precise hysterical pictures, possessing an involuntary, strongly independent character—complete flaccid paralysis, automatic spasms, shaking-tremors, convulsions, marked anesthesia—are all, more or less, anchored in old, general, animalistic reflex mechanisms; and that, partially at least, they are specially related to both great instinctive types of reaction—the " violent-motor-reaction " and the " sham-death-reflex." Therefore, the same roots from which arise the elementary movements of emotional expression (" shaken with fear," " trembling in all one's limbs," " paralyzed with fear ").

As belonging to the unprecise group of hysterical pictures, we might mention astasia-abasia—the wish-to-not-walk-or-stand-any more—and the frequently seen tendency to hide oneself in bed for months from adverse external situations. Many cases of this sort have something instinctive about them, something of that diffuse, idea-poor state of affectivity which, with vague impulsiveness, may directly radiate into a general motor attitude; they may be compared to the simple act of hiding in animals, the wedging in between things, and crawling into the sand, which Babak also mentions as transitional forms of the " sham-death-reflex."

While one of the main groups of hysterical manifestations can readily be grouped around the biological radical of the primitive "violent-motor-reaction," and the second, the hypnoid-stuporous types, with their more circumscribed reflex appendicular forms, around the "sham-death-reflex," there still remains a third large main group, which possesses less general biological interest because its type of mechanism can only infrequently be observed in animals, and probably cannot distinctly appear at all in the lower animal series—this is the group with accidental engrafting of a hysterical superstructure upon or at times a preservation of accidental, evanescent ailments and the sequellae of accidents. Here also, the more or less instinctive tendency to sham, to defense against and flight from menacing situations in life does not utilize the old, reflex radicals, but makes use of optional material, which accidentally plays into its hands during the course of the individual's life. And, perhaps, will build a healing sciatica into a hysterical limp, an accidental gastric upset into hysterical vomiting, and the sequellae of a slight head injury into a pseudo-dementia. The tendency to defense against and flight from the menacing situations of life, in the elaboration of this incidental material, certainly does not again proceed optionally, but likewise makes use of biologically preformed pathways, which resemble, perhaps, the semi-reflex pain protection attitudes, and the spontaneous habit formations and automatic fixations resulting from long practiced functions. This group, which we will study more closely in our consideration of the hysterical habit-formations, builds therefore, the transition from the innermost center of the hysterical reaction-type—with its ready contained, old radicals—to its outermost periphery. It is there where the simple aggravations and simulations begin, which neither originate from a vague, instinctive affective condition, nor in any way utilize preformed mechanisms, but where freely selected dissimulations are voluntarily improvised with rationally thought out intention.

CHAPTER II

Hysteria and the Impulsive Life

The view that certain hysterical reaction types have close relationship to the general animal instincts is especially confirmed by the large mass of hysterical reactions which group themselves about the impulsive life. By special preference, hysteria takes root from two main sources: the instinct of self-preservation—in the form of fright and anxiety toward dangerous situations, and from all the emotions and conflicts which accompany the sexual life. Wishes, struggles, and disappointments of an erotic nature form the large main group of experiences which produce hysteria in ordinary civil life, especially in women; the war neuroses—and a part of the accident neuroses—contribute the other very large half of hysterical reactions. However, not in the sense that the acute fright syndromes, for example, are simply identical with the hysterical neuroses which evolve from the soil of acute fright or (more frequently in the war) from chronic anxiety; but in the sense that both have a close relationship to and show indissoluble transitions into each other.

No agreement, as yet, has been fully reached on the question of relationship between hysteria and the fright neurosis.[1] Even though the acute fright reactions, in consequence of unmistakable resemblance, have often been simply labelled hysterical, nevertheless, a sharp boundary line was drawn between both of them as long as the fright neuroses were only considered as acute, automatic, evanescent, and spontaneously healing affective reactions; while hysteria, on the contrary, was only spoken of when such acute reactions became secondarily fixed through the purposeful

[1] The question is clearly worked out in the literary discussions of Kleist and Bonhöffer. Kleist, Schreckpsychosen. Allg. Ztschr. f. Psych., 1918, and Bonhöffer, Zur Frage der Schreckpsychosen. Monatsschr. f. Psych., 1918.

intervention of a " will to sickness," an " advantage by sickness." That these difficulties are not due to deficient observation on either one side or the other, but in the nature of the thing itself, will soon be discovered.

What reactions do we directly observe as a result of situations, which produce fright and danger? Let us first of all consider Wetzel's[2] observations which were recorded near the front during the War, and which agree with the findings of other observers. " June 26, 1915: There are many persons coming who have gone through the big, severe attack of the 20th. The men are strikingly broken, shaky, irritable, and confused; and mostly complain of physical ailments—headache, insomnia, misery, palpitation, rapid fatigue, dyspnea on walking, and abnormally strong reactions to the moist, sultry weather. The observation of great temperature oscillations, abnormal eruptions, and march temperatures is frequently repeated. Many excited and, in part, very vivid trench dreams are seen. Stretcher bearer, S., absolutely dependable and inconspicuous, is now entirely altered—tremulous, irascible, excited, incapable of concentration, shows dyspnea on walking, palpitation, insomnia and headache, temperature after mountain climbing up to 38° C. (100 2-5° F.). Headache is very striking, for example, in the cases of W. and K. who are both very reliable and do not exaggerate. They often admit feeling well, then again, will strongly complain of headache, which is possible, because at such times they have bloodshot, somewhat bulging eyes, and a secretion of tears. During the periods of headache and bloodshot, suffused eyes, W. and Sp. have temperatures up to 38° C. (100 2-5° F.). Pulse 100 or 120."

In like manner, Bonhöffer describes the vasomotor symptom complex as the most characteristic effect of fright. As the acute psychogenic effects of fright, Gaupp names: severe tremors, tachycardia, hyperesthesia, fearful dreams, increased micturition,

[2] The manuscript was very kindly placed at the disposal of the author.

vasomotor-secretory symptoms, and delirious clouding of consciousness. Among the survivors of the Messina earthquake in 1908, Stierlin chiefly found insomnia, increased reflexes, rapid and labile pulse. Knauer and Billigheimer give a detailed description of the manifold disturbances in the vegetative nervous system following fright.

We might say, therefore, that *disharmony of the vegetative nervous system, under the guidance of vasomotor manifestations, represents the most general fright syndrome.* And the resultant general lability of physical and psychic functions offers a favorable soil for the origin of various types of hysteria, although only a small number of cases will continue in that direction; in the majority, spontaneous recovery will occur after a certain length of time. In these syndromes, a psychic aim is as yet not demonstrable; they are to be interpreted as purely reflex.

So soon as those special fright syndromes come into question which, by chance, are enacted in the realm of higher motility or in the psychic field, the matter of interpretation is more difficult. Above all, those pictures which group themselves around the "sham-death-reflex" and the "violent-motor-reaction"; *the fright stupor, the twilight states, senseless running away, the tremor and convulsive attacks.* According to their external symptomatology, these pictures of fright are not fundamentally separable from the usual hysterical reactions as one sees them appear without acute shock under the influence of different affects and strivings. Nevertheless, we may say with Bonhöffer that the acute fright-syndromes contrast themselves to a certain extent with the ordinary hysterical reactions by a strong predominance of vegetative-vasomotor signs, their inclination to more elementary, organically effective convulsions and twilight states, and also, to a certain degree, by the pure forms of fright stupor.

Can the fright reaction and hysteria be everywhere separated according to their inner psychological structure? From his observations on shock psychoses of recent occurrence, of short

duration, and in vigorous soldiers, Wetzel[3] gives the following description: "Seven times the awakening from the exceptional condition could directly be observed. In the twilight state it was throughout dumbfounding how the constantly somewhat theatrical behavior, which in individual cases went as far as puerilism and 'nonsensical talking'[4] stood in contrast with the picture of the awakened man. As a rule, it was difficult to realize clearly that this smart, self-contained, inconspicuous soldier was the actor of the previous occasion. The awakening occurred suddenly."

From such observations it follows that even the acute psychic fright syndromes do not produce manifestations which are of purely automatic effectiveness and direct physiological limitation, manifestations by which the psyche, in a simple manner, was passively overwhelmed, but that even now they frequently contain, in addition, elements which point to an active elaboration on the part of the psyche toward its fright producing experience, and what is more—herein lies the important point—with a directly *purposeful quality.* Not only the precipitating fright experiences will often become repressed, or playfully transformed ("The cavalryman has fallen over," says a soldier in a fright-twilight-state, instead of, "he has been killed"), but also the fright-twilight-state, even in very vigorous and brave persons, can in a remarkable manner assume forms which we are otherwise accustomed to see in criminals and to look upon as signs of pretty coarse hysterical deceptive tendencies, bordering on simulation—the Ganser syndrome with its falsely effective, theatrical behavior.

Stierlin also reports numerous examples of similar fright reactions from the earthquake catastrophes of Messina and Valparaiso. A certain incomprehensible composure or even a contrasting cheerfulness with *repression of the frightful affair* generally belonged to the most frequent psychological sequellae of the catastrophe; but in many cases this tendency to repression immediately

[3] Wetzel, Über Schreckpsychosen. Ztschr. f. d. ges. Neur. u. Ps., 65, 1921.
[4] Vorbeireden.

increased with the unusual fright producing conditions in the form of *puerilism, or of a ludicrous pseudo-dementia.* "And so, on the morning of the earthquake at 7 o'clock, a man of prominent position, who with his family had escaped death, was seen in a nightgown sprinkling the flowers of his garden with a watering-can. Another, a merchant, who had lost his house and family on the day of the calamity, was seen on the quay in his nightgown and slippers, with a large herring in his hand and *continually laughing to himself.*" "Another person also had lost his family in the earthquake; he had come off with nothing more than fright not far from his house. The calamity did not seem to have made the slightest impression upon him; he really knew nothing about it, although saw his tumbled down house and heard his friends talking about it. He appeared *delighted and rode around in his automobile.* When anyone spoke to him, he was wholly confused and laughed. He, moreover, previously was a good father of a family." "After being thrown out of the window by the atmospheric pressure, a seventeen-year-old boy, as though by a miracle, came to rest upon a meadow wholly uninjured. Without showing the slightest concern for his family, he immediately stood up and ran away. In another part of town, he wanted to assist with rescue work. *And therewith behaved foolishly, like a clown.* His severe state of confusion lasted for more than a week. During all this period, he absolutely did not concern himself with what had happened; never inquired about his family, whether anyone was saved, and, on the whole, knew nothing about the whole thing. One could see him aimlessly wandering about the streets in shirt sleeves and without a coat." "Night after night, a sixty-five-year-old bank secretary incessantly cried, 'Papa, Mama—Papa, Mama.' He imagined that his physician was a marshal, and called his son, who visited him, father."

We will hardly be able to avoid the conclusion that the acute fright reactions often already include a tendency to flight from

unbearable circumstances into an exceptional state, a repression from oneself, and theatrical behavior before others; therefore, those psychic factors which the newer conceptions are accustomed to look upon as the specific nucleus of hysteria. We will be more easily inclined to recognize the close relationship of what is fright neurotic and what is hysterical when we remember that both undoubtedly arise from the same stalk of general animal defense instincts.

And yet, we must not simply classify hysteria and fright reaction alike. Certainly, acute fright (and likewise a chronic anxiety from fright producing experiences) is one of the most favorable starting points for hysterical formations. But the fright neurosis essentially remains a wholly acute syndrome, which receives its features from the severe affect under which it stands, and whose duration rests with the short span of time which this affect lasts. The aim which comes to expression therein is not as yet an independent component, but is as vaguely included in the anxiety affect as the tendency of a drowning person who catches at a last straw is a fixed part of his anxiety, yes, is positively identical with it. Repression and theatrical gestures, with a disappearance of the after effects of an acute affective shock, also vanish quite automatically in the pure fright neurotic. He suddenly awakens and once more is the clear, energetic person that he was previously; he again takes up the situation at the point where he left it, when he was overwhelmed by the affect. That is the rapid end of most acute fright reactions. To that part of the fright and anxiety reactions, which further develop into chronic hysterias, is added a new one. With the gradual return of reflection and composure, a transitional phase, according to experience, appears, where the residuals of the acute mechanisms become (be it more instinctive or more rational) accessible to the will of their bearer, in so far as he is either able to completely suppress them or to still carry them farther without too great exertion. This is confirmed by my own evidence as well as by medical experimen-

tation.[5] If, during the return of composure, the more egotistical wish for a permanent separation from the zone of danger or for the attainment of material gain secures the upper hand, it can interfere with the already subsiding affective automatisms causing a fixation. He can repeatedly bring into action a still freshly connected inclination toward relapsing into an attack and a twilight state; he can develop the original slight fright-tremor of marked vegetative determination into a massive shaking tremor, etc.

Therefore, if we wish to correctly understand the relationship between hysteria and the fright-neurosis, we must differentiate two aims: the primary aim, the primary flight or defense tendency, which every strong painful affect implicitly contains and to which the repressions and theatrical formations in acute fright pictures can give thanks for their origin; and a secondary aim, which only begins to interfere during the subsidence of the acute affective shock and the return of reason, and which now produces a chronic hysteria from the acute fright syndrome. Now, where this secondary aim has interfered, we in latter-day clinical usage speak of hysteria in the narrower sense. The acute affect, which includes the aim, dominates in the fright neurosis. In hysteria, originating from an acute affect or from a chronic fear for one's life, the chronic aim, which forms and utilizes the residuals of affective mechanisms, dominates more and more. The former, the fright reaction, is essentially instinctive, built by a momentary, overwhelming situation. The latter, secondary hysteria, hovers more on the boundary between the instinctive and the rational, and, more than the former, is the product of the entire personality. That is the reason why we are unable to separate the fright-neurosis from hysteria, but also cannot identify them with each other.

Is the acute fright reaction a purely physiological reflex of an "extrapsychic" mode of effectiveness or does it depend upon

[5] For details on this point, see Chapter IV.

a hysteria-like autosuggestion? According to previous observations, we will answer this question as follows: In the acute pictures of fright, physiological reflex mechanisms are just as surely demonstrable as hysteria-like elaborations of experience. The vegetative-vasomotor symptom complex may serve as a characteristic example of the first type, and, psychically speaking, directly includes the disturbance of sleep as well as the lability and anxious-depressive disharmony of the emotional life. Also the more organically effective twilight states observed by Bonhöffer, and many epileptic-like convulsive attacks, perhaps, are in part to be added here. On the other hand, the fright twilight-state of the Ganser type is the most pronounced representative of direct psychic elaboration of fright with hysteria-like mechanisms. The direct acute fright syndromes vary in optional combining-ratios between these two poles; frequently they appear inextricably mixed in the same symptom picture, one limiting and strengthening the other.

It is significant for the relationship between the instincts and the hysterical reactions that the beautiful "*major hysterias*" with richly developed massive symptomatology, with reflex mechanisms, violent-motor-reactions, stupors, paralyses, and twilight states, preferably appear in situations which strongly come in contact with the impulsive life, to wit, with erotic conflicts and with danger of life. In the war, one saw these massive hysterias develop not only with acute, dramatic, fright scenes, but still more frequently with simple, insidiously effective anxiety for one's life, or in the garrison or military hospital where there was an aversion toward a repetition of exposure to danger. The reverse is true of such neuroses which contain an aim, a "purpose in sickness," without being so directly anchored in the impulsive life, *e.g.*, the damage suit neuroses of civil life. They are characterized by their diffuse symptom picture, their vague complaints, and by the frequent absence of reflex, hypobulic, and hyponoic mechanisms. Only where the impulsive life is closely impinged upon do we run

across the old instinctive reactions, violent-motor-reactions and sham-death-reflexes in increased numbers.

Let us now consider the relationship between *hysteria and the sexual impulse*. These relations were one-sidedly emphasized in the old school of medicine, and still more in Freud's psychoanalysis; they were even applied as the ruling principle in the theory of hysteria. And again, as a reaction against this, they have at times been too much undervalued. The truth of the matter is that a predominant if not an exclusive relation between hysteria and the impulsive life must on the whole be recognized. The sexual impulse only comprises one large half of these relations; the other, just as important, main group is formed by the hysterical fright and anxiety reactions.

In the development of the individual case of hysteria there frequently occur combinations and anastomoses between both the sexual impulse and the fright-anxiety group. In the neurosis, a repressed sexual impulse often manifests itself as anxiety. On the other hand, especially in children, genuine anxiety can accompany sexual excitement. And so we find hysterical reactions, which in latent form have long been laid out by an erotic psychic conflict, suddenly brought to expression by a fright producing experience. A woman, who is getting old, falls into a severe state of inner tension and jealousy over the engagement of her sister; one fine day she is terrified on the street by a team of frightened horses and suddenly has a hysterical abasia; she never before had reacted hysterically to fright. And, therefore, one impulse stimulus can blend with another, so that together they can bring on a hysterical reaction.

Women and girls share in sexual hysteria substantially stronger than men. It would lead us far astray if we were to mention individually all the conflicts of erotic experience which could lead to hysteria. As some of the most frequent, we might mention: a futile love affair, the marriage of a sister, jealousy, a quarrel with the suitor, an undesired marriage, fear of pregnancy, dis-

turbances of sexual intercourse, an unhappy marriage. And now the physical, now the psychic side of the sexual impulse stands stronger in the foreground.

More important here for us than the individual experiences are the *constitutional foundations.* Omitting the war and damage suit hysterias, and quite in accordance with the observations of Kräpelin, the majority of hysterias in our material also belong to the age of puberty and thereabouts—with a strong preference for the female sex. The age of puberty is familiarly the most delicate touchstone for constitutional irregularities. As a matter of fact, we see a group of constitutional anomalies in astounding numbers among our hysterias: *infantilism,* which generally manifests itself with special strength in the sexual field. In our case histories of the last few years, we find above all the following findings: physical weakness, genital-malformations, dysmenorrhoea; and in the psychic field, general childishness, a weak sexual impulse, aversion to men, an overstrong psychic fixation on the mother, generally a disturbed development of puberty with a tardiness or an uneven establishment of the individual signs. In contradistinction to the compulsion neurosis, the signs of sexual infantilism are very frequently found in our hysterias, but the stronger features of sexual perversion relatively seldom. Homosexual elements are more frequent in the form of an exaggerated and erotically colored enthusiasm for girl friends which again may be interpreted as an increased or a prolonged phase of an essentially normal early pubertal manifestation and therefore to be considered as only a partial manifestation of the infantilistic disturbances of pubertal development.

In the individual case, such disturbances of pubertal development in hysteria, for example, present themselves somewhat as follows: A twenty-two-year-old girl, suffering from ill-humor, hysterical twitchings, and an impulse toward self-mutilation, menstruated for the first time in her seventeenth year. Even to this day she has a physical aversion toward men, yet suffers from strong

sexual excitement, which, after the early pubertal fashion, she gratifies in phantasy and masturbation. Even now her style of letter has that characteristic mixture of childish naïvete and pathos, that combination of the droll and tragic, which characterizes the "flapper" age, *i.e.*, the first transition from childhood into adult life. She said: "If I do not get well, then father shall order a coffin at once, then it will make no difference, if one is cursed. Some one may yet come to me. I am forgotten by God and the world. When someone does come, the apples of mademoiselle, the teacher, must be brought to me." She had become anchored to a peculiar bigotry, and pestered the sensible old local clergyman with her impulse to confess repeatedly and in detail all sins of thought, and masturbatory shortcomings. In the confessional, as he well knows, she at once fights against and gratifies her particular type of strivings. Because the local clergyman, during the confession, is not strict enough with her, she goes across the way to a priest—one who drives out the devils. She soon falls into the usual mixed relation of adoration and eroticism, and, under his suggestive influence, the hysterical manifestations, convulsions, and twitchings soon bud out in full bloom.

Without much difficulty, we can perceive how this entire hysterical development of personality, up to the final appearance of twitchings, had its origin in a standstill of pubertal maturation, and, never getting any further, remains fixed for years in a definite early pubertal phase. The sexual impulse has entirely retained its earlier structure, and, although lively and urgent, has failed to develop the normal sexual goal. The opposite sex will be prudishly declined. The impulse lives itself out, on the one hand, in phantasy-dreams, and, on the other, through masturbation. Her bigotry is also nothing more than a secret byway into which the impulse streams in order to come to concrete expression. The constant confessions in themselves include an urgent and continuous play of thoughts on sexual matters and the pangs of conscience over them; this is another example of an affective

mixture, peculiar to awakening semi-childishness; likewise characteristic is the semi-eroticism of religious fervor, which, unrecognized to itself, draws her with girlish enthusiasm to the suggestive revivalist. After the immature impulse has gone astray in this blind alley, it always assumes more extravagant degrees of religious, semi-erotic aspirations, and finally, with adequate height of affect, culminates or discharges itself into a convulsive hysterical play of movement.

The same thing happens to the *sexually infantile woman when she enters into marriage.* Here also we find an early pubertal-like, vaguely urgent confusion of feeling, mixed with disgusted rejection and an ungratified, idealistically yearning aspiration, which, now overheated and now cold, does not allow an orderly love life to exist, and finally discharges itself indirectly through the old hysterical instinct forms. If anxiety for life impresses its stamp upon fright hysteria, then in the symptom picture of these more sexually nourished hysterias angry disappointment mixed with erotic ecstasy often comes beautifully to expression, especially in the attacks and twilight states. Then also the sensory radiations frequently manifest themselves in genital, near genital, or symbolically displaced dysesthesias.

The situation of such infantile women is that, with the sexual constitution of a fifteen-year-old, they are placed before the demands of life of an adult woman. That is why the concrete approach of the suitor, who at first was longed for in an idealized enthusiastic way, or the prospects of marriage, being an important test as to the health of the sexual constitution, will be answered with an instinctive defense, with convulsions, and sham deaths.

Among prostitutes, both syndromes—sexual infantilism and a tendency to hysterical reactions—are met with striking frequency.

An infantile stunting of the body, more often a deficient capacity for love, and an exaggerated prudishness and shyness in themselves frequently hinder the attainment of concrete, happy love. Such girls are then favorable candidates for the rôle of warped

"old maids." On account of their slight amiability, they easily fall into the rôle of a Cinderella and then act the part with the immature, semi-genuineness of their feelings, like martyrs. "I am a neglected child, no one brings presents for me, I never get justice." She quietly puts up with everything, does not aspire to earthly goods, just wants a modest living, peace, and repose. She finally develops into a pseudo-ascetic bigot or even into a bitter, rebellious attitude of resentment, to a permanent warping of the character line. Her content of life consists of constant friction with brothers, sisters, and parents which dissipates into little remarks and acts of revenge having an offensive, hysterical nature—a lying in bed for weeks, or alarming attacks. Or she comes to a sudden dramatic collapse with a major hysterical neurosis, which prefers to occur at the moment the younger sister becomes engaged. Then once more the perverted impulse violently rears up as sexual envy, and discharges itself in instinctive reactions.

Just as the impulsive life of the hysteric often is incompletely developed in a progressive sense, so also it often is not opportunely withdrawn retrogressively. Impulsive attitudes of childhood continue into adult life, as very often clearly comes to light in the relation to the parents. In hysterical individuals, like many schizophrenias and schizoids, it sometimes happens that a proper dissolution of the instinctive emotional union with the parents and the friendly, neutral independence of the adult is not attained. With enthusiastic tenderness, he remains clinging to his mother. With excessive majesty, the authority of his father remains standing over him, so that in violent scenes he rears up and protests against it, yet cannot break away. A nineteen-year-old youth has a feeling of paralysis in his arm out of fear for his strict father, who always urges him to work; constantly has a feeling as if he were struck on the back. In young women, one observes hysterias, which are wholly directed against the father

and the home environment, attacks which represent stormy impulsive discharges of anxiety and anger against the father.

These forms constitute a transition to the real *hysterias of children,* which partly group themselves around this relation to parents or a closely related school authority. In children, the relation to the parents is that same dominant impulse binding which the sexual relation is in adults. Also the close relation of hysterical reactions to experiences of fright and anxiety is common in children and adults. But there is this main difference, that in children the hysterical forms of expression generally are more closely related to the normal ways of affective discharge than the affective life of adults, and, therefore, the boundaries of strong childish reactions to severe painful stimuli indistinctly merge into what is essentially hysterical. Consequently, in children, we more often find hysterias of an episodical, meaningless character which are not anchored in strong impulsive tendencies, but only in fleeting momentary affects, imitation, etc.

Many symptoms of what is called the "*hysterical character*" are nothing more than stationary residuals of an early pubertal psyche, or unfavorable characterological modifications of the same under the changed demands of later life: to wit, the characteristic antithesis between coldness and exaggeration of erotic feelings, *i.e.,* an overlively and overidealistic psychic sexuality with prudish rejection of its physical correlate, a rapidly vanishing élan of feelings, enthusiasm for impressive persons, a preference for what is loud and lively, a theatrical pathos, an inclination for brilliant rôles, to dream themselves into big purposes in life, the playing with suicide, the contrast between enthusiastic self-sacrificial abandonment and a naïve, sulky, childish egotism, and especially a mixture of the droll and tragic in their way of living. If then older observers of the "hysterical character" preferred to call the hysterical, "big children," it would be still better for one to say, "big flappers." And so, exactly indicate the caesura at which the biological inhibition of development became established,

to wit, the early pubertal period. An immature psyche of this sort contains a greater inclination toward impulsive discharges of affect, and especially toward hypobulic mechanisms.[6] The hypobulic phenomena partly appear in circumscribed hysterical outbreaks, especially in the hysterical attack, partly as permanent stigmata of the so-called "hysterical character" which, on the basis of the strong hypobulic structure running through it, we in a slandering way call "whimsicality," or the distinctive contrast between stubbornness and exaggerated suggestibility.

One of the most impressive and therefore most described constitutional types, perhaps, is just this lively reacting, *early pubertal psyche;* but in our material it is by no means the form most frequently inclined toward hysterical reactions. More often one finds tolerably banal and sallow *stunted forms,* often with infantile stigmata of a physical and psychic kind, but intellectually weak, possessing a certain annoying indifference, emotionally defective, almost torpid or overtender, anxiously-shy, fearful and excitable. They comprise the whole army of marked, psychically defective persons, the *mental defectives, criminals, and prostitutes,* who, not because of a precisely specific mental structure, but simply on account of their deficiency of higher psychic mechanisms, are inclined toward primitive impulsive psychic discharges, among others frequently to hysterical reactions also. In addition, one more seldom finds what is known as the "*cold blooded type,*"[7] but when present, then often in full grown samples with very abundant and richly developed hysterical reactions. This type is cruel, capricious, dishonest, thievish, completely amoral, of unfeeling egoism, and full of malicious intrigues. Much of this type has overflown into the customary description of the so-called "hysterical character." It is a rare type of severer degeneration having distinct transitional forms to moral imbecility, and the schizophrenic group. Furthermore, it is well known that the

[6] See Chapter V.
[7] "Kalten Kanaille."

type of " congenital swindler " is very much inclined to hysterical reactions.

In general one may say that puberty is the favorite soil for hysterical reactions and infantilistic inhibitions of development, and especially with the persistence of early pubertal psychic stigmata most easily give, in addition to the severer psychic defect forms, the nucleus for many " hysterical characters," *i.e.,* for personalities with constant inclination to hysterical reactions. Hysteria is above all a reaction-form " of naïve, undeveloped psychic life " (Kräpelin) of a strongly instinctive, impulsive structure. In the degree that a person separates himself from a primitive condition, or from a youthful age, does hysteria receive the exclusive character of a severe pathological abnormality on the basis of degeneration; and even this only when an extremely severe experience is not to be considered. In youth, hysterical reactions may betray a severely degenerated constitution, but not necessarily so.

Why do hysterical cases more and more disappear from our clinical material with advancing age? Undoubtedly because later the slighter inhibitions of pubertal development do on the whole become adjusted and because in general many other hysterias have no serious abnormal constitutional background, but transiently appear in children and the youthful, as accidental instinct reactions against the adverse effects of experience and environment. Kräpelin established this fact very nicely when he said that a large part of his female hysterias were country girls who, as youthful servants, had become transplanted into a large city, and were not quite equal to the difficulties of this change of environment. Here again one feels like vividly recalling the swimming infusorian, which, as soon as it approaches a zone unfavorable to its life, immediately reacts with " violent-motor-reactions."

With a very severe experience, as in war or an earthquake, not only the immature, but occasionally every person, develops panic, hysterical, and fright neurotic reactions, so that we may conclude

with Hoche, "every person is capable of hysteria," just because everyone carries within him the old instinctive forms, but more or less firmly covered up by the younger characterological layers of culture.

PART II

The Psycho-Physical Dynamics of Hysteria

CHAPTER III

The Hysterical Habit-Formation

Hysterical reactions are prone to arise where strong, impulsive strivings become disturbed in their progress, and the higher personality is incapable of smoothly elaborating this disturbance. It is just as with a plant from which one cuts off a twig: At the place where the striving is cut off, there sprout out hysterical side-shoots. Here a characteristic picture is presented which makes one think. We observe a man in a constantly dangerous situation which his instinct of self-preservation would prefer to avoid, but whose avoidance is prevented by military authority. In an earlier period we only could perceive a simple aversion and a tendency to flight, but later a flaccid paralysis of an arm suddenly developed from it. Or we see a woman unhappily married. Her impulses strive against this relationship, and suddenly the striving has transformed itself into hysterical vomiting, backache, or into a twilight state.

Here lies our question: How does the transformation of the psychic energy of an experience into the well known psychic, motor, and sensory complexes, which we call hysteria, follow? How does a tendency to flight become an arm-paralysis, or marital unhappiness a tic of the shoulder? This important question in the theory of hysteria is then a question of neurophysical dynamics.

The simplest answer would be the following: The so-called hysterical person fascinates us with his symptoms. He deludes us with an impressive scene, because he knows that then our good

faith will free him from his unpleasant situation. He exercises a *purposeful, well thought out deception,* and herewith actually attains his goal. In war neurology, many observers came very close to this interpretation. Of that, so much is correct: In situations which are accustomed to produce hysterical reactions, we can from time to time discover an individual who will admit that he did it intentionally; and what is worse, these deliberate deceptions often run off in the same typical symptom-pictures, as those which are clinically called, "hysterical."

If we assume that every hysterical individual carries on a clearly thought out and carefully planned game with us, the question then arises: How does he do it? How can one voluntarily tremble for an hour, or vomit a dozen times daily, or laughingly allow needles to be stuck through one's skin? Or an entirely different question. A hysterical person limps on one leg, has a sullen look on his face, and complains of headaches, all of which is not a difficult feat, but for the sake of a 20 per cent damage suit, he maintains this condition year after year in the meantime losing an excellent salary and his whole civil existence. How is that possible?

We may observe that the question can hardly be removed whether we consider the striving which is transformed into the hysterical symptom picture as clearly thought out or as instinctive, subconscious, or even unconscious. In both cases, we must explain the paths which lead from the striving to the symptom picture. And, in the first place, this can best be done in hysteria through the same method as we would biologically study the spider's way of living or the reaction forms of a crab, to wit, purely by observation with avoidance of clinical or moral preconceptions and apart from "sick" or "healthy," "good" or "bad," "hysteria or simulation."

In the first place, the striving which passes over into the hysterical symptom picture will simply be considered as "the will" of the hysterical person without too much regard as to whether in

one case, it acts more rationally, in the other, more instinctively. For the simpler hysterical mechanisms, we will get by with this view. Later we will take up more complicated phenomena—splitting of the will and splitting of the personality.

Many of the simpler hysterical mechanisms have close relationship to what in everyday language is called a "bad habit." And we will summarize them under the name, "*hysterical habit-formation.*" A school child has accustomed itself to writing in an awkward position, with the trunk obliquely inclined to one side and strongly bent forward, while its eyes are brought close to the paper. The child does this under the false but subjectively perceived feeling that it can write better that way. If the child is immediately taught the correct position, then the false one will rapidly and without much effort be overcome, but if, however, it has continued for several weeks or months then very strong fixation of the bad habit may occur. When the child now writes, its attention must constantly and intensively be directed upon its position. If it is to sit up correctly, someone must again and again remind it of the proper position. So soon as the exertion of regulative consciousness ceases a bit, the body automatically and without participation of the will falls back into the wrong position. Therefore, the relation between the conscious will and a group of motor acts is at any time reversed. The will, for a definite purpose, connects up a motor group; this will persist only so long as the will is energetically directed toward its maintenance. In a short time, however, the motor connection becomes independent. Now it automatically establishes itself as soon as the situation in question arises and will disappear only when the will is energetically directed towards its elimination.

Analogous situations, as in our exemple of the school child, can frequently be observed in hysterical persons. During wet weather a person gets rheumatic pains in his right knee; these are accompanied by slight fever and swelling. With anxious care, the leg is very quietly held in a semi-flexed position. If he desires,

the leg can be bent and stretched to his liking; he only feels pain. Even when he gets up after a few weeks, he constantly limps about with a flexed right knee, gingerly stepping on the tip of the foot and protecting the right leg to his utmost, albeit, the joint is now free and the rheumatic symptoms have disappeared. Only after very energetic and frequently repeated command, will he now stretch the knee with apparent effort, move it correctly a few times, and then immediately fall back automatically into the old position. After another month, if left alone, a uniformly elastic, tenacious resistance of the flexors will follow, perhaps, on attempting to stretch the right knee. This resistance will require no effort from the patient and is independent of his attention. The flexed position remains fixed even at night during sleep. The man, with all his strength, is no longer able to stretch the leg by himself. After a few more months, one will find a thoroughly hard, immobile contracture of the flexors.

Here the relation of the will to the motor process is similar to that in the school child. For plausible reasons, a definite position of the body is at first voluntarily striven for. If this position exists for any length of time, it first begins to impress itself upon the mind (einzuschleifen), *i.e.,* becomes spontaneously connected up with more certainty and smoothness. Then step by step it *emancipates* itself from the will and begins to lead a semi-automatic, later a completely automatic, independent existence. Not only is the will not required to add anything for the further continuance of the position, but may even have to exert effort to get rid of it. This is a principle which everywhere runs through normal neurophysiology—in the realm of perceptions and thought productions, as well as in the motor spheres.

Bleuler[1] speaks about a "chance apparatus" (Gelegenheitsapparat) being connected together at the very onset for definite psychic productions, even this from the very beginning does not

[1] Bleuler, Über psychische Gelegenheitsapparate und Abreagieren. Allg. Ztschr. f. Psych., 76.

require the supervision of the conscious will in every detail. His formulation is doubtless correct. We will give a description in his own words:

"I have just finished writing a letter, and put it in my pocket with the intention of depositing it in the nearest mail box. No further thought is required about the matter. The first mail box I see, while out walking, induces me to throw in the letter. I am working on something which I cannot or do not wish to break off. Through some reference it occurs to me that I must get a book from another room. This idea, perhaps, only busied me for a fraction of a second and then vanished from my consciousness. When the moment arrives at which I am able or ought to get the book, I go into the adjoining room to the book case and take the book. And thus it happens a thousand times, so self-evidently that I usually take scant notice of it. It is only when something goes wrong that the whole mechanism comes to my consciousness. Being above all motor minded (Motoriker), the idea of dislocation fixes itself best. Not infrequently, I will find myself at the place where the book can be found, or with the person whom I had something to tell, then I must stop and think, 'what I had intended to do,' wherefore I came to this particular place. Or I have later realized that I do not require the book, yet, at the critical moment I go for it just the same. If one makes a chosen attempt (Wahlversuch), an apparatus is connected together in the brain which, for example, upon the shining of a green light will react with the right hand, and upon a red signal, with the left. In the individual reactions, the conscious ego has very little, often nothing more, to do; the reaction occurs automatically. If they are somewhat difficult, the objective results are often not in unison with the subjective control of the conscious ego. The latter may be confused at the moment of the task, but even then the machine may react promptly and correctly, or even reversed in that consciousness disturbs the reaction by its interference.

" In these cases, through a simple decision, we have erected a cerebral apparatus for a definite chance or occasion, and it will carry out this decision in quite the same way, as habit creates automatic apparatuses, or like the phylogenetic apparatuses have been erected in our central nervous system for reflexes and instincts.

" Every decision, every intention of undertaking something, produces such an apparatus. This holds for the simplest form of automaticity (reminding one of the reflex) which reacts to a definite stimulus (simple psychological experimental reaction), as well as a life problem, whose cessation may only come with death, and whose accomplishment, requiring all one's strength, will be interrupted a thousand times. Likewise one decides to awaken or not to awaken with the alarm clock, to find a certain plant, to see misprints, etc.

" Such a chance-apparatus can also arise by a coupling together of the centrifugal part of a reflex with any sort of a new stimulus (the association reflexes of Pawlow) ; a plantar reflex is several times provoked synchronously with a bell signal, whereupon it then will be released through the sounding of the bell without any other stimulus.

" Experience shows us that *every chance apparatus must be again disconnected, if it is not to function.* As a matter of fact, this is self-evident, but with the inevitable, albeit false, understanding that all movement and all function, and so every central nervous function will sometime cease by itself, we forget to think about it. A thing is just as little changed without a cause in the field of physiology as in the field of physics. Consequently, we can see that when we have once made up our mind to count the number of times struck by a bell, it is not so easy to stop counting. Even if, after a certain beat, we are able to think of something else, we still continue to count somewhat automatically and know very well when the last beat rings. The habit of taking notice of misprints in a belletristic reading easily becomes unpleasant.

Mach writes: 'If I rhythmically clench my fist several times and then pay no further heed to this movement, it frequently requires especial determination to stop it.' Schizophrenics not seldom are unable to stop repeated movements at the right time. The catatonic experiment of Kohnstamm is here apropos. In this, while standing against the wall, one presses the back of one hand against the wall for about a minute, and then simply turns away without changing the position of the arm. The latter will then slowly and automatically ascend while the muscular contraction, which had at first pressed the hand against the wall, now lifts it up—there being no impediment. If one is tired, one frequently cannot get together the energy necessary to discontinue working, and one continues to work on against one's will. After mental exertion, the automatic continuance of the work easily becomes a hindrance to sleep. Perseveration in gross cerebral lesions, where a patient is no longer able to come loose from a definite word or a simple act, because any other impulses repeatedly derail him into the just used pathway, also shows that the cessation of a cerebral function is a definite act. In a rough way, the same thing can be observed on the dying brain in animal experimentation, where electrical stimulation can disengage from any point a once released movement *e.g.,* a definite movement of mastication. Well known also are the rather infrequent occurrences, where, as a result of a bullet in the oblongata, an animal or a person is held tonically fixed in a definite position which is assumed because the all too sudden injury, on the one hand, left no time for a disconnection of the function by the brain, on the other, because a smooth bullet under the circumstances does not by itself necessarily need to start a stimulus, which might call forth another attitude in the spinal cord."

For our purpose, these enlightening demonstrations of Bleuler are of double importance. In the first place, an action once started often already has a certain independence of the will, so that the will only initiates a completed connection (Schaltung) which

forthwith begins to work by itself. And secondly, that such a connection—established for a certain purpose—such a chance apparatus, does not again cease working by itself without anything further, but requires a new volitional striving which is particularly directed toward bringing out of function again this once released "chance apparatus"—to disconnect it, because it would otherwise continue to work uncurbed, and under definite circumstances actually does continue to work.

Now, let us place ourselves in the position of the above described rheumatic patient. He purposely put together a chance apparatus, a definite motor connection, for the protection of his inflamed right knee. If he is an energetic person who enjoys life, and who longs for activity and work, then his will, in unison with the disappearance of the joint pain, will withdraw the chance apparatus. So that, with the disappearance of the inflammation, the automatic pain-protectory-position (flexed position of the knee) will be thoroughly discontinued.

But let us now assume that the same patient is in a situation where the illness protects him against painful struggles, or even gives him positive advantages; that it withdraws him from disagreeable marital discord, or procures him compensation from a damage suit, or protects him from danger of life in war; then the relationship between will and chance apparatus becomes different. The apparatus is made, but as soon as its period of usefulness has elapsed, no one is there who will again disconnect it. The inflammation has disappeared, but the pain-protectory-position continues unchanged.

The important thing is this: Not even an active striving for the continuance of the connected apparatus is required—*a purely passive disinterest of the will* is quite sufficient to make possible a hysterical fixation. For it is not the continuance of the connected apparatus which requires a special, new, volitional act, rather the reverse, the discontinuance of the same.

Hereby, we have easily explained to ourselves the remarkable

way in which a hysterical disturbance can finally work to the interest of its bearer, and that, even so, he is not properly conscious that his own will, his own psyche assisted in building up the hysterical picture. In many other cases, we not only see this passive continuance of a connected apparatus which has become independent, but also an active, rationally conscious, adherence to the same.

Let us summarize, step by step, the course of events in the development of a simple, hysterical, habit-formation:

1. For a sensible purpose, a *chance apparatus is connected together,* which in itself already maintains a certain independence of the will.

2. With longer duration, the chance apparatus, like every often practiced function, *begins to impress (einzuschleifen) itself upon the mind, i.e.,* by degrees works easier, simpler, smoother, and more automatically.

3. With increasing impression upon the mind, the apparatus becomes more and more *emancipated from the will,* it acquires an independent existence along side of, yes, even against the will.

We have, therewith, finished the hysterical habit-formation. The habit represents a process which biologically indicates the transition of a voluntary into a reflex nervous function. Hysteria uses the same pathway by which, in the process of phylogenesis and in the development of the individual personality, expedient adaptations and accomplishments (walking, writing, reading, skating) at first learned with difficulty, are transformed from a series of volitional acts, formally abridged, into reflexes and automatisms.

The simplest path for a hysterical habit-formation, or a persisting chance apparatus is very frequently through the simple disturbances of gait and position, by hysterical superimposition upon the residuals of an organic paralysis, by hypochondriacal pain-protection attitudes, and compensations for subsided surgical injuries, rheumatism, etc. In motor disturbances, the habit-for-

mation can especially well be followed according to its developmental stages. Nevertheless, the persistence of chance apparatuses and their gradual independence also play an obvious rôle in sensory manifestations and in the purely psychic field.

A part of the body is painful and inflamed. Forthwith, a chance apparatus is connected together which not only couples any touching or movement of the involved limb but even the thought of such with ideas of pain, yes, with painful sensations in sensitive individuals; then, as is well known, the patient already cries before he is touched. If the will is not interested in convalescence, the chance apparatus then remains standing, and every contact with the now healed limb will as before be answered with gestures of pain, and probably also by sensations of pain; an automatism, therefore, which becomes more and more independent, impressed upon the mind, and unites itself with motor habit-formations. This persistence of a painful-gesture, which occurs upon touching a definite area of the body, is wholly identical with the process in the association reflexes of Pawlow; it exactly corresponds with the plantar reflex which is coupled with a bell signal.

These parallels, then, lead over without boundaries into the most varied associative couplings, *e.g.*, the symbol forming displacements. Whenever a patient sees a definite food article, she becomes nauseated. Years ago this article of food was eaten upon the same day that a repulsive erotic demand was made of her. Here we are not dealing with an adaptative motor connection, but with an accidental associative coupling, created by temporal coincidence. If the personality is disinterested in its disconnection, then this chance complex will also continue to function.

Furthermore, the general attitude of being sick, in its entire concatenation of physical and psychic behavior (languor, lack of will, need of lying down) is above all a purposeful adaptation, a chance apparatus which, without more distinct and special symptoms, may continue independently after recovery from a real illness, and frequently will be continued by hysterical persons.

CHAPTER IV

The Laws of Voluntary Reinforcement of a Reflex

If a small tap against one's own ligamentum patellæ is delivered which does not call forth a patella reflex, but, the characteristic muscular feeling of stimulation in the quadriceps (*i.e.*, the latent prestage of the reflex)—and if, to this process, we now add a little voluntary quadriceps innervation, we will observe that, with the same strength of tap which previously did not produce by itself any visible trace of a reflex, a lively knee-tendon reaction occurs. The movement thus created has a perfect reflex form; it displays a rapid fling which is quite different from a purely voluntary imitation movement of the same extent. And, moreover, no trace of the superimposed voluntary innervation can be recognized. In our experiment, we make the noteworthy observation that it is only slight and diffuse volitional impulses, *i.e.*, those directed toward a simple increase of tension in the quadriceps, that allow the reflex to step over its threshold. On the contrary, as soon as we help along with a fully conscious motor objective, or, through an energetic innervation, attempt to assist the reflex in the definite motor form of a knee-jerk movement, the experiment fails; the automatic and the voluntary impulse do not melt together into a unified reflex movement, but frustrate each other; the resultant movement is voluntary in type, and has not the characteristic feeling of motor ease, but rather, in individual experimental persons, there occurs a feeling of difficulty in performing the movement (in comparison with a purely voluntary movement). In other words, then, the voluntary movement without advantage disturbs the reflex process; yes, even to its own disadvantage.

Let us turn back to our first experiment, the successful volun-

tary reinforcement of a reflex; to be sure, the accompanying *subjective psychological state of affairs* is certainly worth another glance. We just said that through the harmonious fusion of an opened up reflex process with an added voluntary movement, the latter has a feeling of extraordinary facility. This, however, is very roughly expressed. If, then, we subtly analyze the psychic processes which accompany our self-experimentation, we will discover a complicated state of affairs, something as follows: As long as we (directly before the hammer-tap) induce a slight over-innervation of our quadriceps, we have the weak but distinct feeling of conscious volitional activity. But at the moment of the reflex jerk we experience a surprise, if you will, a disappointment; we become uncertain and ask ourselves: "Have I really voluntarily assisted the innervation?" We repeat the experiment again and again, always with the same psychic experience. The origin of our doubt can be readily ascertained. From the time of the hammer stroke the distinct feeling of muscular exertion which accompanies every movement, however slight, is absent (because of the reflex facility of movement); therefore, the controlling consciousness fails to appreciate the completed volitional impulse. Our perception, before the tap of the hammer, says yes, while after the tap of the hammer it says no; and *the characteristic terminal feeling of doubt, as to whether we really did voluntarily assist in the experiment, arises from this psychic competition.* So soon as we realize this, we know that the first feeling was correct.

The validity of the facts just carried out, on the example of the knee-tendon reflex, allows itself to be confirmed many times by everyday experience in the field of other reflex processes. After an irksome mountain climb, after excited running for the train, there occurs in many persons a *slight tendency to tremor of the leg musculature,* which particularly becomes noticeable as foot-clonus when, in sitting, only the anterior half of the foot rests upon the ground. With rest, the symptom rapidly disappears,

although for some time there still remains a feeling of excitation in the musculature, as a sign that the excitation of the reflex path has not yet been extinguished, but has only gone below threshold. In this stage it is again possible (in quite the same way as in the patella experiment) to keep a rather prolific foot-clonus going by means of a slight voluntary hypertonicity of the corresponding muscle groups; this clonus will immediately disappear upon the disconnection of every volitional impulse as thoroughly as possible; and, moreover, upon the slightest voluntary inhibition. He who recollects such as a rule semi-playful experiments, made in a state of psychic relaxation, will again find that the play of movements in its pure, rhythmical, effortless, reflex-form, will only then allow itself to be maintained when the voluntary reinforcement is introduced to the subthreshold reflex rather lightly and diffusely, so to speak, or unintentionally. On the other hand, the reflex will forthwith be disturbed as soon as we, strongly and with conscious aim, attempt to imitate the definite motor form of an ankle-clonus; in the latter case, for example, there occur brusque interruptions of the previously rhythmical movement with accentuation of the added voluntary contraction wave; hence, to a phenomenon which can be compared to the extra systoles of the heart and which, in our case, is again accompanied by a feeling of motor difficulty (in contradistinction to the feeling of ease which accompanies a successful ankle-clonus).

I do not wish to bore you with any further enumeration of parallels which will impress themselves upon the attentive observer in the everyday processes of life. Let us recall, however, the enormous chattering of the teeth which children, on going to bed in an unheated room, can produce at pleasure without effort and for some length upon the basis of a slight cold-tremor, when the real cold reflex has already disappeared; or the quite genuinely sounding paroxysms of coughing which many people, without an impelling cough stimulus in slight laryngeal catarrh, provoke to fill up an agonizing pause in conversation. In purposeful reflexes,

like the cough reflex, the close union between the voluntary and the automatic motor processes is already in itself a narrow one.

We may now briefly summarize the laws observed in the coöperation of reflex and volitional processes:

(1) *A reflex under subthreshold stimulation can be brought into activity by the addition of a volitional impulse of a very definite kind,* or, an automatically active reflex can be maintained and strengthened through such an impulse.

(2) *A movement arising in this way has a genuine reflex form* and exhibits no sign of the voluntary movement which has been fused with it.

(3) *Volitional stimuli which are weak and only directed toward a diffuse hypertonicity of the motor reflex field, above all, act reinforcingly upon the reflexes.*

(4) *The subjective perception of their voluntariness, by the person who wills, easily becomes masked by a psychological process of competition within the resultant sensation associated with the motor process.*

(5) *Strong volitional impulses with a definitely intended motor aim in the direction of the reflex lead very easily to a disturbance in the process of the reflex,* and may in its turn be rendered more difficult[1] by the reflex process with which it clashes.

Have the laws of voluntary reinforcement of a reflex anything to do with the theory of hysteria? We all have the feeling that the hysterical person in some way brings his will into play as a quiet participant in the transaction of his disorder. It now depends upon the *how of this participation,* which must be analyzed to the finest degree and must be traced out to its darkest recesses.

[1]Also see Med. Klin., 1918, No. 9, the work of Paul Hoffmann: "Über die Beeinflüssung der Sehnenreflexe durch die willkürliche Kontraktion." This work contains noteworthy confirmation of our point of view. Hoffmann also contests the customary belief that the reflex optimum can be found with complete, voluntary, muscular flaccidity. His view on the effect of Jendrassik's reinforcement of the knee-jerk coincides with our arguments.

Hitherto, opinions have begun to crystallize themselves around the following three poles: One trend pays especial attention to the *physical portion* of the hysterical disturbances; presumes *displacements in the nervous apparatus, pure reflex processes;* and so, with the purest elimination of all ideogenic factors, draws a part of the process hitherto designated as hysterical near to the realm of organic neurology. It reached detailed discussion in the Oppenheim controversy.[2] Opposed to this are the more *psychologically oriented observers* who are in turn divided among themselves by a deep abyss. One party tries to discover, if possible without digression, *conscious volitional processes* in wide range as the chief fault behind hysterical manifestations—drawing the latter as near as possible to *simulation. Cimbal's conception of the purpose neuroses,* for example, aims toward this direction, and also the therapeutic views of many field neurologists as, perhaps, came to expression in Forster's polemic against R. Hirschfeld. The other side, on the contrary, seeks to make as much use as possible of the assumption of *unconscious mental processes,* which, by *complicated pathways influence their respective organ.* This line of thought nourishes itself above all from the *theoretical views of the psychoanalytic school.*

A considerable number of authors hold themselves aloof from these finely drawn theories, and limit themselves to the direction of the empirically hardly disputable matter of fact that, in the field of hysteria, manifestations which make more an *impression of being something reflex or involuntary,* somehow, in very different degrees of coalescence, combine themselves with manifestations whose *(be it conscious, be it unconscious or, better said, more rational or more instinctive) connection with the volitional sphere* of the patient is unmistakable. If one assumes this, then a further question arises: *In what way does the will of the patient share in the formation of hysterical symptom pictures?*

While in the hysterical habit-formations nothing stands in the

[2] Oppenheim, Die Neurosen infolge von Kriegsverletzungen. Berlin, 1916.

way of a direct, gradual development of a hysterical condition from the volitional impulses of the patient, in the more *reflex pictures,* we have before us the paradoxical matter of fact that we are forced to assume a *purposeful participation of the psyche in the origin of such disturbances whose forms of expression do not at all lie in the realm of free will.* For example, a rapid, rhythmical and somewhat constant shaking tremor, in general, will absolutely not allow itself to be imitated voluntarily under normal experimental requirements, either by healthy or by nervous persons; we can easily convince ourselves by trying it. Also such attempts at imitation, which correspond to the slower and not strictly regular types of hysterical shaking tremors, after ¼ to ½ hour in general lead to such a degree of fatigue in the experimental person, provided we do not employ some artifice, that its continuance becomes impossible. In other words: *A shaking tremor, under these circumstances, cannot be simulated until it becomes reflexive* by impressing (Einschleifung) its nervous pathway upon the mind.

In many hysterical conditions, this circumstance forms the main obstacle to the conception that in their origin the will comes directly into play. We repeatedly recognize a purpose for illness at the source of the disturbance; and yet, again and again see an apparently pure, reflex process crop out at the end of the same. These facts induced the majority of nerve specialists, even those who believe that the hysteric has more or less *conscious* interest in his illness, *to insert in their reckoning, between this trend of the will* (Willensrichtung) *and its final reflexive result, some mysterious factor, "X", as a connecting link*—an abnormal, extraconscious mechanism which would make the apparently puzzling *transmission of psychophysical energy from the volitional path to the reflex path* logically conceivable. Depending on the scientific taste of the individual physician, this "X" will be presented more in the form of unconscious, intermediate events of a psychic nature, or, more in the form of physical nervous

displacements and short-circuits in the central nervous system—if one does not further simplify the logical problem through the denial of a useful participation of the personality, and the assumption of an exclusively physical reflex process.

Do we need this "X" in our calculation? That will now be tested according to the laws for the voluntary reinforcement of a reflex.

In the War, the observations of the front medical officer indicated that the tremors, like other symptoms of emotional discharge (compulsive crying), *arose serially* among the soldiers under definite, strong, influence, only to fade away sometime later after a period of rest. With the exception of individual cases, the tremor as yet has not the character of a coarse shaking tremor, but rather of a finer vegetative muscular one ("Trembling and quaking at the knees; the embrasure clatters, when I project my gun.") We can designate this first and in most cases only stage as that of the *acute, affective reflex,* inasmuch as everyone without difference and even against his own will, may be seized with it. Let us now imagine that certain of the later chronic hysterias arose somewhat in the following manner from this mass of persons with acute tremors: During the period when the simple, acute, affective reflex by itself begins to become subthreshold, the patient *contributes* toward its support *a slight volitional impulse* which, as previously mentioned, has the form of a diffuse, muscular, hypertonic effect upon the reflex field. With the extraordinary facilitation which the volitional impulse experiences through its flowing into the still present subthreshold reflex form of movement, it is now quite possible for the patient to maintain the tremor reflex voluntarily and without too much fatigue, until, according to the law of mental impression (Einschleifung) it goes over into the chronic, reflex form in which it again becomes more independent of constant volitional support. And so the fine tremor of affect or fatigue is transformed into the coarse, clonic form of shaking tremor, just like in the

clonus experiment after mountain climbing, or the tremor due to chilliness in children. What cannot easily be done by a single attempt of imitation, namely, to continue a tremor movement until it becomes impressed upon the mind, can very well be accomplished through the coöperation of a subthreshold reflex excitation and a volitional impulse, whereby, as noted above in our experimental observations, the form of movement is regulated by the reflex process and only the missing part of the motor driving power is contributed by the will.

If we take this mode of thought, which above all has been intentionally described along rather crude lines, as a basis, then *the process may be divided biologically into three phases: The first, or stage of the acute affective reflex, which, with the second phase of voluntary reinforcement of the reflex as a connecting link, passes by degrees into the third stage of chronic impression of the reflex upon the mind.* That we at least come very near to the truth with this point of view can be induced from the behavior of the tremor toward internal and external influences upon the will; this behavior is characteristically different in the three phases. While in the first stage, as the testimony of reliable observers teaches us, the voluntary suppression of the tremor is not successful or only so with great effort, and while experimentation in the third stage shows that honest effort on the part of the patient often will no longer directly lead to its goal, the second stage, which in particular includes the observations of the front line medical-officer and the neurologist who receives cases directly from the front, is characterized[3] by the easy manner in which its disturbances of mobility are influenced by the simplest, pedagogic methods. I will come back to this later. The firmness of a tremor, which has arisen in this way, elapses in a *very remarkable curve in that, after an initial high point, it sinks into a deep remission during which it is easily accessible to the will, and then*

[3] Compare among others with Kurt Schneider, Einige psychiatrische Erfahrungen als Truppenarzt. Zeitschr. f. d. ges. Neur. u. Psych., 39, 1918.

with progressive ascent once more gains reflexive obstinacy (reflektorische Hartnäckigkeit). This empirical course of events agrees in the best possible manner with our point of view.

No less clarifying is a study of the laws of the reflex for an understanding of the *psychic* side of development of the war hysteric. If we assume that, in the second stage, the tremor patient voluntarily reinforced his reflex, we must conclude:

(1) That, *in this stage, he was to a certain extent conscious of his coöperation in the continuance of the shaking tremor,* and with suitable action could have directly caused its cessation.

(2) That, on the other hand, *the existence of this coöperation on his part became very easily obscured from his view.* We are forced to this last demand by observations in the third stage where, in many cases, we can no longer distinctly recognize (even with the psychiatrically trained eye) coarse abnormalities in the perception of health. It is just this point that requires our particular attention, because, it again appears to offer good support to the assumption of wholly extraconscious factors in the origin of symptoms. But here the reflex experiment shows us, par excellence, not only that this paradoxical psychic grouping of symptoms is possible *(direct participation of the will in the reflex process and at the same time an uncertain appreciation of this participation);* but also, how it comes about. Because, in the first place, it is *not gross, clear-headed simulation* that maintains the reflex process—this would be more apt to disturb it—but just the addition of weak, diffuse, volitional stimuli. During the stage of overfatigue and overstimulated relaxation, rationally thought out influences are less effective upon the reflex than the vague impulsive ones. And through the competition of self-perceptions, occurring in the separate phases in which the reflex elapses, these volitional impulses (in themselves already weak) can in suitable cases be effaced to such a degree that they are almost unrecognizable to the subject.

When we consider how little it is necessary, even in the second

stage, for the subject to perceive the participation of his will (in the formation of symptoms) as a firm, irrevocable magnitude, then we will understand once more, without the aid of puzzling extraconscious mechanisms, that, *under the transforming influence of time, the relations between the personality and tremor process have still further displaced themselves* in the third stage. The more one's *memory,* which is familiarly a most agreeable confederate of the more ignoble undertakings against one's own self-criticism, remodels the previously already uncertain facts of symptomatological origin into a favorable direction and the less the slight muscular tension, which has become a habit, is perceived as something voluntary, the more (in the tremor patient of the third stage) that psychic attitude gains ground which we may designate as *" objectification."* To his consciousness, the symptom picture by degrees develops from something possessing subjective collaboration into an objective magnitude which he passively faces like an observer. In a small number of cases, this objectification is so completely successful that the patient stands before himself and the physician, bona fide, almost like a psychically disinterested party who had been overtaken by a physical illness.

It would, in fact, be striking if by degrees the tremor patient did not prolifically turn to his own advantage, for the exoneration of himself and thereby objectification of his disturbance, the psychological process of effacement which in lawful manner accompanies the self-perception of the voluntary reinforcement of a reflex. Added to this in the third stage is another peculiar *entanglement of biological relations* which, as we will see, must straightway sanction the objectification.

The view here upheld, that the objectified hysterical disorder of the third stage is indebted for its existence to a previous phase of voluntary reinforcement of a reflex, has above all (as a pure *possibility* of *thought*) the advantage over many other theories by the circumstance that it uniformly and in the most direct way

explains the manifold and contradictory phenomena occurring in the third stage without suppressing a part of the facts and without being forced to take a *factor* " X " into consideration. *That the course of events* is not merely a possibility of thought but *a real fact* is shown by the above mentioned *Forster-Hirschfeld controversy*[4] which is selected as an instructive example. Hirschfeld published a definite suggestive method for the cure of persons with war tremors. Whereupon, Forster attacks him by showing that in his own patients he *eliminates the tremors by severe, verbal reproof* in which he explains to them that their behavior is not sickness but a bad habit. The " constantly somewhat strenuous trembling" rests, according to his experience, upon conscious exaggeration. Hirschfeld, thereupon, justly answers that Forster's views were gained from an earlier period of the disorder than his own.

One could at most protest against the conclusive force of this analysis by saying that the severe, verbal reproof is nothing more than the suggestion method of Forster, *i.e.,* it does not work according to its word content as such, but plainly as an impressive scene. He who believes in the popular half-truth that it does not matter what type of suggestive means is employed, must be prepared for this objection. Let us for once imagine that we suddenly approach a blameless citizen, as he harmlessly walks upon his street, with the command to immediately give up the stolen money. Although the effect upon him might be dramatic, it would by no means be very suggestive. Hence, one will have to admit that the success of the severe, verbal reproof *presupposes a certain feeling of guilt in the reprimanded person,* and, consequently we must agree with Forster when he charges his patients (in the second stage) with conscious exaggeration. Instead of

[4] R. Hirschfeld, " Zur Behandlung der Kriegszitterer." Münch. med. Wochenschr., 1917. Forster, " Zur Behandlung der Kriegszitter." Münch. med. Wochenschr., 1917. R. Hirschfeld, " Zur Behandlung der Kriegszitterer" (a reply to Forster's observations). Münch. med. Wochenschr., 1917.

saying: The tremor patient is conscious of his exaggeration, one would, of course, prefer to choose the cautious formulation: He has the capacity of becoming conscious of his complicity, at a given occasion, without much ado. Because, first of all, we saw that the voluntary reinforcement of a reflex, as such, need only a trifle obtrude itself upon consciousness; and secondly, the average man is not spontaneously in the habit of taking mortifying psychic matters of fact so directly and undilutedly to heart; he is not accustomed to make them clear to himself in such an inconsiderate manner as can be done for him by the cold outsider. This difference in itself between ours and Forster's mode of expression is not very essential for the medical and sociological judgment of the genesis of hysterical shaking-tremors and the numerous related forms of expression of peace-time hysterias. It is only essential to recognize that the difference is unimportant, *i.e.,* that the *lesser consciousness of the ways and motives* by which a definite volitional effect comes about is *no characteristic of the disorder, hysteria,* but a *general attribute of infinitely many normal psychological processes* which for some reason have occasion to shun the full light of self-criticism.

Although Forster had experiences similar to many field neurologists in the war, Hirschfeld, undoubtedly, had the majority of the neurologists at home upon his side when he maintained that, in tremor cases which had grown old, the simple method of Forster would no longer absolutely lead to the goal. Even the very vigorous therapeutists of the home area do not in general desire to miss suggestive aid in the treatment. At present, it certainly would be saying too much, if one wanted to maintain that hysterical cases of the later stages were not in part assailable purely pedagogically; I have convinced myself of it by my own extensive experiments (Übungsversuche). But here *an appeal to the good will, much more than an appeal to a guilty conscience, leads to the goal.* The old hysterical case also endures very rough treatment. He can bear it, if we call him a lazy person who does

not exert enough effort against an existing disturbance, but, unlike the hysteric of the second stage, he cannot tolerate an attitude on our part in which, without further ado, we altogether contest the existence of something that has become real, in which we treat him without restriction as a malingerer. Herein, simply, the growth of the objectification comes to expression.

In addition, certain interesting *self-testimonials* of the war period teach us something about the relationship between subsiding reflexes and the disposition of a reflex to the will of their bearer. Ambold[5] describes a war neurosis under medical self-observation. In November, 1918, he became completely exhausted by the trying hardships that existed during the turmoil of the retreat; he was taken to a field hospital. "Here I suddenly awakened, on the third day of the transport, with a rather coarse shaking-tremor of both my arms. My first impression was one of astonishment, then psychological interest came forward . . . After short hesitation as to whether I would utilize the symptom in the sense alluded to (for the extortion of medical aid, which was lacking), I made it clear to myself that this goal could also be attained more directly, and forthwith suppressed the shaking which required no slight exertion. In spite of my wretched physical condition, the shaking itself in no way fatigued me. The following morning—and because of this observation the very obvious case is probably of interest—the arms lay quietly, *but the shaking mechanism stood completely at my command* as much as I liked. Without effort, I was able to shake or hold my arms quiet, and, without further ado, pass over from one to the other. When the course of my illness and external events at the end of eight days, while in the hospital at home still feverish and hardly any better, allowed me to think of trying the shaking mechanism again, it was no longer at my command."

This case is a very pretty confirmation of our conception. It

[5] A. Ambold, Eine Kriegsneurose in ärztlicher Selbstbeobachtung. Münch. med. Wochenschr., 1922.

shows how, in the stage of subsidence of acute affect and exhaustion neuroses, a period occurs, when the reflex becomes accessible to the will (and, indeed, not only the instinctive, but also the rational, conscious will). And there is no doubt that at this moment the motor force or the psychic impulse sets in, which "Hysteriaizes" the acute nervous excitation, *i.e.*, which, in persons willing to be ill, now forms a chronic purposeful neurosis out of a short, physiological, affective or exhaustive episode. In this manner, we also find that again and again, in the everyday hysterias of peace times, an acute scene, a household altercation, severe anger, fright or anxiety situation, or convalescence from an illness offer to a previously latent "will to sickness" a point from which to take root, and places the necessary reflex mechanisms at the disposal of this will.

If, in the previous example, we substitute a war-weary infantryman in place of the enlightened physician, we can realize without additional phantasy how this acute reflex neurosis would have proceeded to further development.

This further development is described for us by R. Hirschfeld[6] from a group of fresh war hysterias from whom he extracted a confession: ". . . The third patient came from the front with eight other fresh war hysterias who had tremors. He had a severe disturbance of speech which resembled stammering. His shoulders twitched. . . . After being rapidly cured, he was accused of simulation. He confessed, and explained that *as a child he had suffered from a disturbance of speech* which, however, had been cured. In consequence of fright, he *had stammered for one day, but it disappeared and then he intentionally retained it.* The twitching of the shoulders he had copied from others on his way back. It is at first very difficult to carry on the tremor, and one tires very easily. But if one has maintained the tremor for a day, it is then very easy to retain it permanently without

[6] Ztschr. f. d. ges. Neur. u. Psych., Ref. 15 S. 76, 1918.

fatigue. He further added that most of the tremor cases which he saw en route, when they were unobserved, trembled little or not at all. In these cases, therefore, it was a matter of feigned symptoms, *which,* as they admitted *had existed with more or less greater intensity a few hours after the fright,* and then completely disappeared. Only a patient would practice himself into a disturbance which from the first, even in the slightest traces, never had existed. As a motive for their behavior, they consistently declared a wish to be permanently removed from the zone of danger."

For these cases, the question, "hysteria or simulation," is entirely passed over, because it almost has only practical and social but very slight biological significance, and is without essential importance for our neurophysiological problem. In the case of the first man, we can see very nicely how an automatism (stammering) having been already preformed in his childhood constitution is again specifically brought out by the fright producing experience, and how the will chronically fixes or "hysteriaizes" the subsiding fright reflex. In like manner, his comrade by means of volition continued the short reflex tremor of fright after it had become subthreshold. We believe, after the reflex experiments presented in the beginning and after descriptions like those of Ambold, that the volitional continuance of a nervous automatism must be very easy, if the will begins to intervene at the right phase of the subsiding reflex ("without effort," "wholly ad libitum," Ambold tells us). On the contrary, Hirschfeld's witness describes how difficult it is to first have to create, by voluntary imitation, a motor process whose way has not been so specifically prepared. He obviously did not bring the tremor and twitching from the front, but first copied it from his comrades, during the transportation. (A certain amount of opening of the pathways may, however, have been present after experiencing the situation). This tremor, almost wholly created by voluntary effort, is very difficult and tiresome on the first day; yet, in the

end, it obviously impresses itself upon the mind and becomes "very easy" and free from fatigue. It is interesting, here, that the impression upon the mind required only one day; therefore, in automatisms whose path is already prepared, the chronic impression of voluntary reinforced reflexes makes still less difficulties. The patients of Hirschfeld, with one exception, use such mechanisms whose path is opened up. This agrees well with other experiences on the hysterias of war and peace times, to wit, that quite free improvisations, so-called, "pure simulations" only seldom become secondarily "hysteriaized," that as a rule the "hysteriaization" more often seizes upon acquired or constitutional crystallization points by means of the laws of habit-formation, of voluntary reinforcement of a reflex, etc.

Hence, we may venture to consider as empirically founded the differentiation of a phase of voluntary reinforcement of a reflex from a phase in which the reflex is objectified and impressed upon the mind (eingeschliffen). In brief, therefore, the essential part of our conception is as follows: Conventionally, one has been accustomed to consider the *hysterical shaking-tremor* and related pictures occurring in war and peace-time practice as a sickness, a pseudo-sickness, or, at any rate, as something *nearly homogeneous from beginning to end;* to look upon them in the light of certain physical disorders which at first are slight and harmless, but, by degrees, always become more deeply and maliciously rooted through neglect. On the contrary, close examination shows that the *shaking-tremor in its different progressive phases* is not homogeneous, but *something essentially different, i.e.,* briefly stated, *in the first a reflex, in the second aggravation, and in the third a sort of illness.*

After these facts, it is worth while to trace out somewhat more exactly the details of symptomatology of the third stage; as it were, to developmentally understand its complicated continuance from the simple germ anlage of the second stage. In so doing, we will have occasion to essentially modify the above concept of

impression upon the mind (Einschleifung), which was temporarily instituted to give a rough survey. In the third stage, we meet with *a rather typical sympton triad which is composed of the shaking-tremor itself, of the pseudo-spasm, due to the increased tension of the corresponding musculature, and of a definite form of psychic overexcitation.* We can put aside those secondary symptoms, *e.g.,* disturbances of gait and increased fatigability, which result from this foundation. Oppenheim, in particular, justly called special attention to the combination of shaking-tremor with pseudo-spasm. Through the laws of reflex, this empirical concatenation becomes surprisingly clear to our understanding. And we will not go wrong if we regard the *pseudo-spasm of the third phase as genetically the descendant of that process of the second phase* which we have designated as *the voluntary hypertonization of the reflex area.* In accordance with this, it would be derived from the nonreflexive component of the primordial anlage, *i.e.,* from the direct volitional portion which the patient allows to flow toward the subthreshold reflex process for its reinforcement. As a matter of fact, we see that even in the third stage the pseudo-spasm has not on the whole become purely reflexive, and that on the contrary with definite artifices or frequently even with a simple command to relax, the volitional portion which clings to it is betrayed.

In this respect, *Hirschfeld's method of treatment,* already mentioned above, is especially instructive. R. Hirschfeld made the *removal of the pseudo-spasm the fundamental principle of his therapy.* He attacked the shaking-tremor by way of muscle tonus. By direct request, diversion of attention, and above all by passive movements, he produces complete muscular relaxation in the tremorous area of the body; with this relaxation, a cessation of the shaking-tremor simultaneously ensues, and this success will at once be used to surprise the patient by saying to him suddenly, "Look, the trembling has disappeared." It is clear to him who has followed our trend of thought that only the second part

of this method represents a " suggestive form of treatment." The first and main part represents, so to speak, a *direct causal treatment,* namely, the straightest and most natural manner to let the patient once more retrace the path by which he came upon his shaking-tremor. By tensing, he was able to maintain his tremor. So soon as he no longer tenses, he is no longer able to tremble. Hence, the one main support of the physical half of the shaking-tremor, the voluntary muscular tension, will be withdrawn, and immediately the tremor reflex sinks below its threshold, to which it would have long ago sunken if it had not been prevented from doing so by the will of the patient. In that moment, then, where this result occurs, it will at once be used to overcome with one blow the psychological fixation of the shaking-tremor designated as objectification, *i.e.,* to free the patient, by means of the recent impression, from his imagination that a so-called sickness compels him to tremble.

In my opinion, Hirschfeld, with correct empirical instinct, has represented, as it were, *in pure extract the effective principle of a whole class of modes of treatment for tremors.* This follows, on the one hand, from the fact that in his therapeutic sittings, he himself could abandon every suggestive accessory, and still more distinctly, on the other hand, from the fact that physicians who work with coarser suggestive aids of most varied kind, so far as I know, chiefly utilize the trick of passive movements. One could convince oneself by experimentation how much more difficult it is, for example, directly to bring a shaking-tremor to a standstill with application of an electrode or verbal suggestion than if one avoided such an introductory scene of suggestion by means of passive movements and relaxation commands and demonstrated the motor quietness attained thereby. Herein we see (just like in numerous receipts of older medicine) that, in methods of treatment which are purely empirically discovered, the externally most prominent aid factor often gives the name to the method, while the insignificant real nucleus of the procedure only enjoys the rank

of a small artifice. A likewise important and generally practiced artifice was the custom of first thoroughly eliminating the tremor of the legs by placing the patient in a recumbent position on the examination table, *i.e.*, with motor relaxation of the tremorous musculature, and only then expect the patient to tense his musculature in standing and walking (whereat not seldom a small relapse occurred). This experiment makes especially clear the inner causal relationship of the shaking tremor with voluntary muscular tension.

The method of treatment, which medically is alone logical and empirically the most skilled, is, therefore, that in which one *first of all eliminates the shaking-tremor by suppression of the voluntary muscular tension,* then *by means of this momentary success at once clears away the objectification,* and only now, after the peripheral musculature as well as the will of the patient are properly adjusted, proceeds *by hard drilling to train in the strong, reflex-inhibitory, purposeful movements in place of the false, diffuse, muscular tension which, as we saw in the experiment, favorably influences the reflex.* From this one sees that what we sometimes carry out in the mystical twilight of superficial knowledge, and what is adorned with the not very flattering nimbus of a magical medical-quack, in reality allows itself to be dissected into a *well recognizable series of separate acts which are thoroughly sensible and pedagogical,* alongside of which, what in the narrower sense is known as " suggestive " (whence arises the name suggestive treatment), sinks back into the modest rôle of assistant, which only befalls it in the hands of the thoughtful physician of educated taste.

After this investigation, one can understand the *difficulties* that, from the side of the patient, oppose the *removal of a genuine, deeply-rooted, shaking-tremor* and related hysterical hyperkinesias by a direct, volitional route. In the case of a slight hysterical habit-formation, perhaps, in a pseudo-arthritic limp, it is a relatively simple problem for the intelligence and will of the patient,

if, after careful explanation of the medical groundlessness for his behavior, we presently demand of him to stretch his knee, which till now had been held flexed, by means of a very simple, direct innervation impulse. We can boldly demand him to do this without much ceremony. On the contrary, how much more complicated is the psychophysical state of affairs which exists in the shaking-tremor and related disturbances. It is so complicated that, up till now, we physicians ourselves were frequently not clear as to how it came into existence. When the shaking-tremor in its separate components is once neurologically impressed upon the mind and psychologically objectified, it is in fact not always easy for the patient to rid himself once more of the ghosts which he has called; to come out smoothly, by his own strength, from the spontaneously made labyrinth of mad self-deception and indirect, motor, causal connections. Then simple faith in the word of the physician and a will not to tremble any more are no longer sufficient. Particularly unfortunate is the *paradoxical matter of fact that the patient must simultaneously relax and tense all the more, i.e.,* he must in the same moment give up the false diffuse innervation which is impressed upon his mind and take up the proper, direct purposeful innervation. To make both of these clear to the patient at once, and to produce in him at the same time the absolute certainty that he is not sick, in many cases exceeds the limits of the simple, direct exercise methods, and thereby, also the possibility for the patient by his own strength to abolish the shaking-tremor with good will and through self-practice.

Now we will turn back to an analysis of the symptom triad of the third stage. The way by which the will of the patient, through the medium of muscle tonus, influences throughout the motor mechanism of the hysterical shaking-tremor and, therewith, the inner relationship between tremor and pseudo-spasm has under comprehensive elucidation become convincingly clear. But if we had occasion to suppose at the onset that a fusion of volitional

components with a subthreshold reflex process was in back of the hysterical shaking-tremor, the question now is: What has become of the subthreshold reflex process further on, the reflex component of the third stage which is that of the fully developed hysteria. This brings us to *psychic overexcitation* which *is the other typical, attendant symptom.*

Here now are two possibilities which forthwith might well be kept separate. In a smaller number of cases, the subthreshold tremor reflex, which for the sake of example we had assumed to have grown from a manifestly acute tremor of fright, is also preserved further on in a purely reflex condition without any assistance whatsoever from the patient. This is the case with *habitually excited nervous individuals,* who, to start with, have a low threshold for the tremor reflex, and then in such individuals in whom *severe exhaustion or severest emotional shock*[7] *have produced more enduring disturbances of mental equilibrium.* Such persons, exactly as one finds in acute, severe neurasthenias, are throughout weeks and months still affectively overexcited and, so to speak, constantly on the verge of trembling spontaneously. If nervous exhaustion or shock comes to expression in a hysterical symptom complex, then such patients require the most careful medical judgment, because we must bear in mind that here the hysterical sympton *contains so much emotional reflexness* that it *comes near to being a spontaneous nervous symptom* and then that the volitional influx, which perhaps the hysterical symptom picture in addition experiences, originates from the severely confused condition in which the volitional instrument of a shocked personality finds itself.

The great majority of our tremor cases did not have to suffer

[7] In a neurophysical sense, moreover, one need in no way generally decline Oppenheim's theory of shock, even if with Gaupp one would concede to it no theoretically cognitive (erkenntnistheoretisch) and decisive significance. We consider that Oppenheim did a great service in carefully working out what is reflex in hysteria, although our conclusions are fundamentally different.

from such serious emotional disturbances. The effect of shock, in so far as it existed, begins to subside after a few days; it does not simply disappear, however, but by degrees makes room for a condition, one might say, of *artificial psychic overexcitation;* this comes to expression, in complaints of shyness, anxiety, timidity, irritability, and sensitiveness to noise. One still sees experienced old tremor patients who have developed this condition with genuine professional skill; who understand how to suck excitation material from hardly perceptible trifles, from harmless noise, from a banal letter, and what little they win thereby is temporally and quantitatively most carefully utilized; such emotionally well trained recipients of compensation are then able on all decisive occasions, *e.g.,* attempts to work or medical reëxamination, to transform the small exciting factors, which naturally fall off, into copious waves of excitement having a desired reflex, physical effect.

A good example of the *mechanism of affective-gain,* as this typical hysterical process will be briefly called, is given by the following picture—well known to every neurologist from the beginning of his activity in the war. An inmate of a neurological station has an attack or gets into a loud dispute. If the physician will appear on the scene about half a minute later, he will already find the little space around the patient filled with closely packed groups of fellow patients, and even now they flock hither from all directions—from their most distant haunts. They are the same persons who hardly an hour before had complained of anxiety and sensitiveness to noise, and who now, being apparently chemotactically attracted by the noisy scene, forthwith go to the noisiest place. What are they all doing there? They are doing just what an ocean liner would do that still had a long trip ahead. They are bunkering. *They are loading up with the emotional fuel which must continue to keep their reflex machine going.* Here also belongs much from the field of what is called "*psychic contagion.*" For example, the way in which the excitant, unpleas-

ant feeling in the observer, which regularly accompanies the sight of unnatural forms of motion (shaking-tremor, tic, attacks, hysterical grimacing), becomes transformed by these persons into their own disease values.

Upon good grounds, we assume that the degree of subthreshold excitation of the tremor reflex, which is an indispensable assumption for the active maintenance of the shaking-tremor by way of voluntary reflex tonus, comes into existence by a definite mechanism of affective-gain which consists of a *conceivable quantitative and above all temporally protracted utilization of all the exciting factors of daily life that offer themselves.* The ability to attract affect, being above all of importance for the duration of the tremor process, will also be promoted by mental impression (Einschleifung) which just as lawfully seizes hold of purely mental activities as well as physical functions. When a child on the street has received a box on the ear for which it wishes to repay itself, then, first of all, it cries involuntarily from a pure pain reaction. When the first thrust of affect is about to subside, one can see that the child has a violent look and intentionally continues to cry; whereupon, in a short time it spontaneously arrives at a persistent condition of boundless wailing from which it even then does not extricate itself after the cause has long been forgotten. Here, upon the psychic side we also find the *law of reflex* which *stipulates the three limbed series of phases: first, a short reflex thrust of affect,* then *voluntary affect reinforcement,* which equalizes the deep remission of the reflex process, finally reascent of the curve to a *semi-reflex persistent affect.* We meet quite the same type of sequence in the field of degenerative hysteria, *e.g.,* in the prison psychoses, and in normal adult life, with a working of oneself into an emotionally effective complex having a suitable direction of affect (katathymen "Sichhineinarbeiten"). In the field of chance hysteria, we everywhere meet with its naïvest as well as its finest forms. The *persistent affect of the tremor patient,* which maintains the reflex, is

composed *of off-shoots from the main, primary thrust of affect emanating from military or accidental experiences;* this, above all, still betrays itself in later months by regular, frightful war dreams and a certain idiosyncrasy against military forms and military authority. And this primary persistent and voluntarily prolonged wave of affect is kept alive by the *small secondary waves that enter into it,* and which arise from the affective utilization of everyday experiences and are built after the same three membered scheme.

The *therapeutical counter-proof* of this view is easy to make. We very soon learned how valuable it was for the treatment, if we only once tied off the most obvious possibilities for the tremor patients (and likewise for all other physical and psychic hyperkinesias) to enrich one another affectively. With a further development of this line of thought were developed the *abstinence and isolation* methods (Binswanger, etc.), whose ideal type is represented by the dark-room treatment which, as far as possible, generally cuts off all mental stimuli, also those coming from the sensory fields. While the methods of treatment of the Hirschfeld type quiet the motor overexcitation by withdrawing the diffuse muscle tonus, the abstinence methods attack it on the opposite side by *depriving the reflex component of the shaking tremor of its affective reservoir.* The effective principle of truly rational, empirical methods of treatment for tremor allows itself to be simplified into these two short formulas: *"tonus-withdrawal"* and *"affect-withdrawal."* They find their support in two other principles which are common to all treatement of hysteria; impressive wording which removes the objectification, and firm consistency which removes the will to sickness.

In the purposely very schematized course of a typical shaking neurosis, as we have just described it, there are still several supplementary lines to be added. It is evident that the different stages were not tied to a definite period of time and that on the whole not every stage in every case was distinctly marked. It is especially to be emphasized that the *third stage with its fully*

marked character, i.e., the hysterical neurosis with highest amount of mental impression (Einschleifung) and objectification, only *comparatively seldom* took place. Often enough we see that both processes remain quite superficial; that, after the affect bearing initial stages of the neurosis, there does not develop a persistent tremor reflex; that more often the second stage directly leads over into the *phase of the residuals of a hysterical habit-formation,* which may be designated as the *fourth stage of the tremor neurosis.* This is characterized by the more or less *irregular, inconstant chance-tremor,* as we meet it mostly in the older cases, for example, in the recipients of compensation. Furthermore, *the second stage,* that of the voluntary reinforcement of a reflex, will only be *indicatively met with* wherever the reflex process (*e.g.,* in constitutional neuropaths with exhausted nervous system) in itself is strong and persistent, and the self-perception of the volitional supplement (Willenszufuhr) considerably wiped out.

Finally, of course, *the first stage of acute, reflex thrust of affect* can entirely *recede wherever, upon the basis of congenital anlage, the reflex threshold of the tremor reflex is in itself low,* because only a *subthreshold* reflex process is needed for the formation of a shaking neurosis. In many neuropaths smaller emotional stimuli are sufficient to call forth as much subthreshold tremor excitation as the will requires to take hold of. This accounts for the numerous cases in which anger, the reprimand of a superior officer, or the taking up of quarters in the garrison precipitated the shaking. Next to acute mental shock, chronic emotional tension, which garrison duty and front-line service so frequently maintained in not very robust personalities, is especially suitable for a reduction in value of the reflex-threshold; yes, they are, perhaps, more important than the acute stimuli. It is by no means unbelievable, when many patients trace their disorder *to a cold or to fatigue.* Because the tremor of chilliness and fatigue is just as suitable for the point of attack of voluntary, tonic rein-

forcement as the tremor of excitement. And then, of course, *certain severe neuropaths with an especially low reflex-threshold, e.g., the anxious debilitated* who even in ordinary life are practically always near to trembling, can freely "*simulate*" the shaking tremor without a precipitating cause worth mentioning, if one chooses to call the manifestation of severe congenital inferiority simulation.

On the whole, much could still be done for a finer understanding of hysterical disturbances by a careful study of *normal reflex mechanisms,* especially where they are only indicated as *insignificant partial components* which are *concealed in the volitional processes,* and by an exact observation of cases with *constitutionally nervous reflex preparedness.* With the sole expression, "psychogenic," there is such rapid judgment and so little that is understood. For the tendency toward a *monosymptomatic,* coarsely caricatured elaboration of a separate reflex picture in hysteria, it is especially important to observe that, without much ado, there is really no constitutional neuropathy; that, on the contrary, the *separate, irritably-weak components of the nervous system can each have their own threshold of stimulation*[8] (lively vascular excitation with weak tendon reflexes, marked tendency toward tremor with meager skin irritability, etc.). Wherever the reflex threshold is at its lowest, the will oversteps it and creates a monosymptomatic hysteria from the form of reflex at hand; from the cerebral-vasomotor system, a hysterical attack; from nystagmus, a tremor of the head, etc. All this presumably quite often in accordance with the same three limbed schema of voluntary reinforcement of a reflex, as we saw it in the shaking tremor, and also not necessarily with complicated extraconscious "dissociations."

Another reflex concatenation, just as banal and insufficiently considered in the theory of hysteria, must be briefly touched upon here, to wit, the *biologically normal unison of action between*

[8] For details on this point, see J. Bauer, Die konstitutionelle Disposition zu inneren Krankheiten. Berlin, Springer.

muscular movement, sensibility, and the vasomotor system. One again and again reads of the contention that hysterical disturbances of sensibility [9] are merely artificial, suggestion products of the physician. That is, first of all, notoriously wrong, and then we do not need this contention to demonstrate what ought to be demonstrated thereby, namely, that these changes of sensation need not represent objective signs of disease or stigmata of abnormal constitution. Certainly slight differences of sensation allow themselves to be suggested without effort; but this does not explain why, with elimination of all suggestion, we nevertheless in definite hysterical disturbances again and again run up against definite sensory arrangements.

Let us make the following simple experiment: After a long sleep, one allows an arm to lie motionless in the state of relaxation occurring during sleep. Herewith, one can subjectively psychologically observe the following matter of fact. In the degree that all *sensory stimuli,* the cutaneous sensation of touch, as well as the deep tissue sensations, *are absent* from the arm, *the pleasure* or involuntary urge to move the arm disappears; yes, there occurs an agreeable feeling of paralysis—a pleasure in not moving. Inversely, the *want of motor innervation* and especially the falling out of muscle and joint sensations, which is determined thereby, *strengthens the consciousness of complete absence of feeling*—the sensory *"forgetting"* of the entire extremity. One can say that even to the daily and apparently quite voluntary reciprocal action between sensation and movement there still clings a remnant of the reflex process, which in lower biological stages in this also stood in the place of the volitional process. Movement and sensation harmonize with each other both up and down. If, furthermore, we take into consideration that the *disconnection* (Ausschal-

[9] Of extraordinary importance for the correct understanding of the reflex component of many hysterical disturbances of sensibility are, among others, the works of Goldscheider (Goldscheider, Über Irradiation and Hyperasthesie im Bereich der Hautsensibilität. Archiv. f. d. ges. Physiol., 1916.).

tung) of a *muscular action* (particularly in the hanging position of an extremity) results automatically in *considerable changes in the circulation of blood, especially in the venous part;* and that this deterioration of vasomotor relations in turn reacts unfavorably upon sensibility and upon the motor capacity of the muscles, then we understand how a *circulus vitiosus* of theoretically unlimited range can develop from these three factors subsequent to a voluntary shutting down of an extremity.

In other words, this experiment again places before us the anlage of one of the severest, most pathological, and theoretically much emphasized, hysterical syndromes, to wit, *a complete flaccid monoplegia* which receives its precise neurological character from the *symptom triad: muscle atony, severe anesthesia, and vascular disturbance* (turgidity and cyanosis). In place of sleep, we need only substitute one of the other causes of reflex muscular flaccidity: *fright, exhaustion,* a *fixative bandage.* We will then rapidly come to the supposition that this ideal form of hysterical akinesia in its developmental process represents the exact image of a typical hyperkinesia, the shaking tremor, which we have just cleared up. Let us assume that here sudden fright, which previously produced the reflex tremor, brings about reflex muscular flaccidity and insensibility (Gefühlsertaubung), then this reflex *" paralysis with fright "* (as it is expressed by the laity) will spontaneously subside again in a short time; but it allows itself to be maintained without difficulty by a gentle and again semi-reflexly perceived *volitional impulse* (exactly as in our experiment) until, being seized by the automatically effective *causal circle* of *sensibility, motility,* and *vasomotorium,* it is led over into the chronic reflex stage.

I need not carry out any further the numerous parallels which, in other pictures of hysteria, follow from this examination. One can now understand, without further ado, why *hysterical hypesthesias* again and again superimpose themselves *upon parts of the body which move poorly or abnormally*—upon a pseudo-ischiatic

leg, or upon an area comprising a protected joint.[10] Naturally, these normal reflex processes will in turn be autosuggestively brought into relief and varied by suggestion from the outside. Even in many quite diffuse and apparently voluntary differences of cutaneous sensibility existing in constitutional neuropaths and which in turn are further developed into hysteria, one cannot, moreover, avoid the impression that they stand in close reflex association with the vasomotor system. One need only recall for once the rapidly changing congestions and erythemas (naturally, the degree of moistness of the skin also comes strongly into consideration) of vegetatively labile neuropaths, and one will then admit that a *capriciously fluctuating, unsymmetrically distributed, cutaneous sensibility need absolutely be no sign of voluntary deception or suggestion on the part of the physician.* There is no doubt, however, that it can be and often is produced by suggestion. Consequently, these simple hysterical accessory findings (Nebenbefunde) also might often allow themselves to be explained by a subjective overemphasis of a real reflex-process. And so, *in many hysterical habit-formations,* one could already demonstrate in the anlage *small, reflex, partial components.* One recalls, for example, that the voluntary position of rest for painful parts of the body, which form the point of origin for so many hysterical habit-formations, also contains a little of the reflex (the surgeon speaks of *" reflex abdominal spasm "* in the pain of appendicitis).

Let us briefly summarize the determinations arrived at from the example of the hysterical shaking-tremor. We saw *two separate causal series emanate from the personality of the patient.* One of these, by means of the *technical extraction of affect* (technische Affekt-gewinnung), indirectly maintains the subthreshold reflex form of tremor, while the other, through the direct influence of *voluntary muscle tonus,* contributes the missing motor guiding force that brings the tremor reflex up to a con-

[10] One can take as a comparison the marked disturbances of sensibility which develop from fixative, surgical bandages.

dition which is above threshold. Further on we saw how, with inner consistency, *katathymic objectification* developed from the legitimate *confusion of affairs* occurring during the self-perception of voluntary reinforcement of a reflex, and how this psychological process, together with *motor and affective impression upon the mind* (Einschleifung), considerably recasts and complicates the original psychophysical state of affairs, and thus *divides the process into different phases.*

We have illustrated, by several examples from war-time hysteria, the combined effect of mental tendencies with nervous automatisms, because this type of hysteria, being a great experiment on masses, was particularly suitable for analysis, in so far as here the symptoms were especially built upon a massive scale, and the effective emotional stimuli as well as the wish tendencies came forth clearly and uniformly. But just as the hysterias of war time brought nothing fundamentally new in their external symptomatology, so also we will not expect their inner, physiological and psychological structure to be fundamentally different from the hysterias of peace time.

We also see that the hysterias of peace time, in so far as they do not develop from the residuals of an injury or an organic disease through a fixative habit formation, prefer to fasten themselves to acute emotional shocks: fright, anger, anxiety, jealousy, sexual excitement, an accident, fright by horses, fear of the father or teacher, upon meeting the suitor, a scene at home, an erotic adventure; hence, to such emotional influences that, with especial ease, strongly set the reflex and instinctive mechanisms into excitation. If, through the natural effect of the emotion, the reflex pathways are first brought into action, we can then often very directly observe—especially in the acute initial stages—the voluntary reinforcement of a reflex; here also both ways of producing hypertonia of the voluntary musculature and the mechanism of affective gain by artificially collecting and accu-

mulating emotional excitations are recognizable with special distinctness.

We see how the nervous person, by an autohypnotic staring (Geradeausstarren) of the eyes, aggravates a slight clouding of consciousness, which accompanies a normal affect, into a twilight state. We see how the hysterical child prolongs the short, convulsive closure of the glottis, which accompanies reflex-like, angry howling, until suppression of respiration produces cyanosis and unconsciousness. How some would develop the reflex hawking of embarrassment, that occurs upon recalling something disagreeable, into a paroxysm of coughing, or by active pressure expand a feeling of nausea into hysterical vomiting. How a psychopath irritated to the point of anger, aided by excited running to and fro, tension of all his muscles and forced breathing, increases the reflex vascular congestion in his head more and more until an explosive twilight state breaks out, or until the nerve and muscle excitation, which is increased more and more by muscle tonus and vasomotorium, discharges itself in a tremor or convulsive paroxysm. These hysterical productions are also subject to the laws by which mental processes are impressed upon the mind (Einschleifung) and objectified, so that after a time and with a given situation they now come into activity quite without effort and as though spontaneously. The aim which comes to expression in them hovers between the rational and the instinctive.

We also saw that the war hysterias freely used constitutionally preformed automatisms, in that affective experiences and tendencies brought out in particular weak points in the hereditary anlage. For example, the effect of fright would reactivate a stammering which was present in childhood. In the hysterias of peace time the relation between experience and anlage on an average is displaced more to the favor of the latter; on the whole, they show more degenerative nervous anlage and less the effects of severe experience. And it has been long known that persons who have reflexes and instinctive reactions which are habitually

quite easily impressed, persons in whom emotions are transformed with "extraordinary ease and rapidity" (Kräpelin) into physical and psychic automatisms, are above all inclined toward hysterical reactions. Now, it is only an inherited single capacity, like an abnormally easy ability to vomit, which the hysteric purposely increases; and then again greater fields, *e.g.*, those of his vegetative nervous system, are congentially labile. Here also the reflex apparatus must first be brought into action mostly by chance and affective stimuli, whereupon the volitional purpose then lends a helping hand. But one can, if seldom, run across pretty examples of major hysteria, on the basis of severe degeneration, who, without much external provocation, can play at all times upon their reflex apparatus, like a virtuoso upon a piano.

CHAPTER V

The Volitional Apparatuses of the Hysterical

Upon an examination table, in the semi-darkness of my consultation room and surrounded by all sorts of phantastic implements, lies an old hysteric. He arrived the day before yesterday evening; has good manners and an open, pleasant face, and was formerly an officer's orderly. Trembling, his legs stiff and contorted, he supports himself upon two canes and drags himself about with an indescribably grotesque manner of walking. He was anxious to be cured; in all seriousness, requested that he be helped. As this man lies upon the examination table and I take the painless electrode into my hand—a moment before he had been calmly and amiably conversing with me—there occurs something inconceivable. Under my very eyes, he suddenly transforms himself into another person, just as if one had pressed the lever of a gently running machine and it unexpectedly fell into a humming wheelwork—a rigid glance, a distorted facies, muscles tensed like ropes, twisted together, drawing away and shrinking away because of something invisible which one wishes to wrest from him. One speaks kindly and soothingly to him—it is as though one spoke to a hissing millwheel. And accompanying the blind fighting and struggling there very soon *occurs still a second action:* a panting, trembling, and twitching—the teeth chatter, the hair stands on end, perspiration appears upon the face which has now become pale. The only thing that will penetrate this tumult are short sharp commands, a firm grasp, rapid vigorous pain. And under these stimuli there again appears, with a sudden jerk, a second transformation which gives one an almost physical feeling as if a dislocated joint had snapped into place. All at once the will is smooth and straight, and the muscles quietly and willingly follow its impetus.

The whole scene has something so thoroughly typical about it that the mere thought of it even begins to bore a former war therapeutist. But how can such astonishing things bore us? "Suggestion," says the war therapeutist—"a hysterically altered state of consciousness." And marked with these two old labels, it falls into the corner with the rest. Is there really something seriously said or observed by the paltry remark, "altered state of consciousness"? As though, under such dramatic affects and tensions, every consciousness would not be altered, narrowed, or clouded. Naturally! But let us for once prefer to single out what the patient himself expresses in every muscle of his body, in every fiber of his tense face, and loudly protests to us: "*I do not want to.*" Forthwith the war therapeutist exclaims, "The rogue." Let us, however, also leave morals aside. But if we want to pass traditional judgment upon him, then let us at once turn back and take the most time honored view: the picture of a person possessed by the devil who tugs and irritates him who strikes and boils over with rage and leaves with a sudden jerk. This picture is the best of all; it is observed with naïve eyes and with perfect correctness. Two wills are seated in one body, and both lay claim to the right of command over it: a natural but weak will, which corresponds to the real personality of the possessed individual and which asks the therapeutist for help against the other will, the "devil," which, coming from the subsoil of his soul, has power over his body. In modern language, we call it the "complex," which, in the unconscious, rules over the hysterical person—at least nearly so. In so far as we do not conceive in the word "the unconscious" anything further than a nebulous Stygian field and in the "complex" nothing more than a personified little imp who makes mischief, we have not as yet fundamentally passed beyond the mythology and devil incarnate shared by the naïve points of view.

There remains no other choice for us: let us for once omit morals and theology, but let us also for once leave Freud and

Janet for a half an hour, and let us imagine that we had never heard a theory or a word about hysteria, and let us not picture anything before us but the real state of affairs in its purest empiricism, nothing except what we see, hear, or touch on our patient. If we thus start from the very bottom, we can then say the following about the officer's orderly who was just described:

This man has, in fact, *two wills.* He has one that seeks recovery—it is honestly meant and really present, but superficial and powerless. And a second will that resists recovery—it is extremely elastic and rules supreme over the motility of the body. Both these volitional tendencies are wholly separate in him and detached from one another with knife-like sharpness. There arise temporally circumscribed mental phases, where he at one minute almost wanted to and in the next thoroughly does not want to. There is no bridge which connects one with the other. And the same contrast which occurs in temporal succession during the therapeutic scenes can be simultaneously determined side by side in the formation of the symptom before treatment. The face and the honest tone of the voice spoke the language of a will that the ludicrous distortions of the legs punished as lies.

But it is not merely a matter of two different tendencies, but also of two different kinds of wills. And therein lies the decisive point of the problem. The kind of will with which our patient resists his recovery shows, in a *qualitative* psychological way, an entirely different structure than that with which he wishes to be cured.

Let us observe the man as he came to us at the therapeutic station. He had long and toilsomely dragged himself around with his disturbance of gait, and when it came his turn for treatment he had then doubtlessly made clear to himself the pros and cons of the situation. He realized that with a therapeutic success he would lose his compensation. On the other hand, the prospect of being able to return once more to his work and pleasure—not as a cripple, but as a young healthy man with a comfortable

natural bearing—must have attracted him. In this competition of motives, his healthy feeling had shown itself stronger, and so—as far as the surface of his mind was concerned—he already came with a final decision voluntarily to allow himself to be cured. This decision was expressed in his countenance and the sound of his voice; during the medical consultation, it was also influenced and increased by sensible arguments. In other words, it corresponded to the normal purposive will (Zweckwillen) which arose from motives.

The second volitional component, as it appears during the consultation, is entirely different. This will acts, like a foreign body, against the entire personality; it is blind, without remembrance for its past, and without an eye for its future; it is punctiformly assembled on the actual second, and its mode of reaction is determined by nothing other than the impression of the second—indifferent whether it contradicts the previous or the following one. And it is not prevailed upon by exercise, persuasion, or sensible arguments. These do not take hold; they are not heard, and are like so much air. But entirely different things: a short, loud word of command, for example, or a sudden blow, a pain, a clutching (Griff), influences this second will; hence, through elementary psychic stimuli or through semi-psychic agents which still have a strong sensory (*e.g.*, acoustic or painful) component; hence those which stand upon the boundary between a physical, coercive secondary stimulus and a simple command.

In brief, *the first will arises from motives; the second reacts to stimuli.*

Secondly, the first will is, as we have already seen, in no way different from the personality; it is much more the personality itself conceived from a definite angle. Even in the average of its separate decisions, there is mirrored the general goal of life itself. The individual decision places itself in line with the ruling tendency of the whole character, from which it arises during the well balanced play of a complicated mixture of motives. But because

the line of life of a fully developed adult person has a firm, straight course, his separate, everyday decisions also move around this straight line with only slight fluctuations.

The second type of volition, which we learned to know during the therapeutic sitting, is quite different. It does not move in a firm course toward an appointed goal. On the contrary, it is now wholly inclined toward one, now wholly toward the other side, according to the stimulus which is realized at the moment. In difficult cases the sittings during a so-called active treatment of hysteria typically progress in a rough, zigzag course, characteristically tossing back and forth in a jerky manner between blind obedience and tenacious resistance, between negativism and automatic obedience. Each and every movement of the hysterical person must first of all be withdrawn from the patient by the therapeutist during a mutable struggle between a sudden breaking off and a hard, jerky reactivity of the volitional energy.

Hence, if the purposive will (Zweckwille) is in a straight line,[1] *then this second type of will is laid out antagonistically.* If in the case of the purposive will (Zweckwillen) there develops an undivided resultant from motives and contra-motives, in this second type of will stimulus and contra-stimulus pulls the indicator without suppression, now to one, now to the other outer pole of the scale.

And furthermore, it is not simply a matter of smooth deflections toward antagonistic poles somewhat in the soft, smooth rounded off way in which the purposive will, in case of need, leads one decision over into an opposite one. On the contrary, this volitional type gives a characteristic bizarre curve which can immediately be recognized wherever it appears. In this case a stimulus will not only give an extremely one-sided reaction, but, at the same time, one that produces a wholly purposeless expenditure of energy and a reaction which may long outlast the stimulus itself. If, during

[1] In a straight line so far as the resultant of the volitional decisions is concerned. The motivated anlage is here also antagonistic.

the treatment, I give a small command to the patient, there is then released in him an enormous resistance and a wild momentary reluctance with tension of the entire musculature of the body that neither in its vehemence, nor in its long duration stands in any relation to the degree of applied stimulus. In treatment these spasms of the will (Willenskrämpfe) make the greatest difficulty for us. We often experience a situation in which a command given to the patient impresses him either not at all or very weakly, because his will is still in a state of tetanus from the last given stimulus. These are all things that allow themselves to be seen and established with direct empiricism upon the examination table. At the completion of the sitting the enormous consumption of volitional and muscular energy gives its receipt for this rudderless and wholly uneconomical type of volitional function in the form of exhaustion and profuse perspiration.

Moreover, the same manifestations of volitional spasm described in the negativistic reactions also can, to a lesser degree, be observed reversed in states of hysterical automatic obedience. When a certain position of the leg is ordered, *e.g.,* in drilling, he prefers to do it in a caricatured manner and with excessive muscular tension, or, in the treatment of mutism, he immediately utters the first sound ordered a dozen times in a spasmodic, verbigerative fashion.

And finally, let us not forget the jerky and complete breaking off of the will, which, in its brusque incalculable way, forms the counterpart of volitional spasm (Willenskrampf). In the middle of successful advancing active therapy, the hysterical person suddenly collapses; he is done for; he does not move a muscle; everything that was previously attained is forgotten; there are moments when neither command nor pain will any longer be effective. He resembles a locomotive, which, with failing steam, momentarily remained standing between two stations.

Hence, *in the moment of action, there are three main phases in this type of volition: the stage of spasm, the state of collapse, and*

the free interval. The last phase is an extremely sensitive and finely balanced condition of labile, volitional equilibrium, which, at any moment, is prepared to unfold into a slavish *Yes,* or a blind *No.*

If we now consider that, during the therapeutic sitting, volitional stimuli act upon the patient at every one of these three stages, we then understand why these legitimate occurrences make such a confusedly complicated and bizarre impression upon the outside observer, because, in wholly incalculable intervals of time, there appear to the same volitional stimulus at one time (in the free interval) an exaggerated reaction, at another time (at the height of the stage of spasm and the stage of collapse) a missfire.

Herewith, we have in broad lines characterized the volitional type which we observe in our patient during the active therapeutic sitting. Its cardinal symptoms as opposed to the purposive will are: (1) *Its predominant impressionability by means of primitive psychic stimuli (pain, command)*; (2) *its coarse, antagonistic arrangement (negativism—automatic obedience)*; (3) *the disagreement between stimulus and reaction—not only in a dynamic but in a temporal reference as well (spasm—collapse).* We have elsewhere already pointed to certain other peculiarities of lower volitional processes—the inclination toward rhythmical repetitions, as well as the instinctive forms of " violent-motor-reaction " and the " sham-death-reflex."

This type of will we call hypobulic. The reason for this name will be reserved for later.

The hypobulic will is in no way limited to the therapeutic sitting, although, here, it appears with especial pureness and sharply circumscribed from remaining mental life. It also does not fasten itself to any degree of consciousness. *In the hysterical attack,* with its impulsive " violent-motor-reactions " and negativisms, it is clearly and independently worked out. In the catalepsies of hypnosis, its hand comes into play as well as in the sudden brusque insubordinations which occur in broad daylight at the working

place. We recognize its veiled activity wrapped up in the every-day actions of definite, severe hysterias and in the inequalities of their psychic modes of reaction. We can allow it to appear sharply in sudden transposition so soon as we touch the area of the body to which it has become anchored. A pull on the spastic muscle, pressure upon the sensitive spot, and immediately the lever of the machine is reversed from "purpose" (Zweck) to "hypobulic"; and, with sudden transformation of the facial expression, the will which previously was apparently flowing quietly becomes tenacious, awkward, boundless, and unmanageable. Or is it the affect which thus changes itself, which cries and whimpers and on account of pain behaves like a madman? Of course, one can also consider the whole process from the affective side. It can be rewritten in general terms under the name of emotional over-excitation, as has often happened, without much being added to our knowledge. But this affect of the hysteric is actually his will, and contains a striving, a resistance, a defense, a purpose. In primitive mental life, will and affect are identical; every affect is at once purposeful; every purpose assumes an affective form of expression.

Onto what, then, has the hypobulic will so tenaciously hooked and fastened itself? First of all, let us once more, for the sake of clearness, limit ourselves to the coarse, motor hysterias. We have just said that as soon as we earnestly lay hold of the special motor complex, *e.g.*, a spastically drawn together limb, the will, in definite types, immediately snaps back into the hypobulic state. Not produced with psychological adaptation but elementarily, by jerks, with the exact mechanical certainty of a physical experiment. The muscular process, therefore, which in these severe cases has become reflex or semi-reflex, has a quite firm and legitimate connection with the hypobulic sphere of volition. But not only the motor automatisms which take part in the special development of the hysterical symptom picture, but more or less the

entire reflex apparatus, even into its most distant ramifications, have a share in this hypobulic anchorage.

In a previously mentioned case, we described how a veritable cyclone of physical automatisms immediately broke loose with the hypobulic transposition. Even cases of hysteria that are sterile and quite poor of symptoms, *e.g.,* with a slight disturbance of gait, all at once begin to tremble vehemently, to chatter, perspire, and to become pale, and bend themselves together into a spasm. It is always the same process: so soon as we energetically lay hold of the hypobulic will, by means of the first word of command, it at once releases an elementary commotion in the physical sphere, which even in its darkest background obeys with a jerk. Every therapeutist, especially in the war, has repeatedly experienced this process hundreds of times on large groups of hysterias, so that he may claim for these cases the empirical value of a firm law:

As soon as one lays hold of *certain hysterical physical mechanisms, the will snaps back into the hypobulic state;* and reversed, *upon the slightest pressure against the hypobulic spasm of the will* (Willensverkrampfung), *the entire reflex motor system springs into action.*

This narrow *dovetailing of hypobulic will with the reflex apparatus* or with the totality of lower sensory-motor and psychic automatisms forms the *one turning point of the hysteria problem toward the dynamic side.* Because the laws which we have just illustrated with motor examples again can be manifoldly recognized in corresponding form in the *field of the sensory and psychic mechanisms of the hysteric.* Whether we stretch a hysterical flexor spasm, press upon an ovarian pressure point, or a pseudopainful joint position, we always meet with the same hypobulic defense affects. On the other hand, it is quite indifferent to the irritated hypobulic demon whether at one time he hurls a tremor or convulsive paroxysm at us, at another time a lower reflex

psychic process, a twilight state, or an impulsive explosion of affect.

But let us turn once more toward the other side. The close dovetailing of the hypobulic will with the reflex apparatus corresponds in such hysterias to an often *rough separation from the purposive will.* Here, in its relation to the purposive will, the hypobulic will resembles a mysterious second-self which pushes its pale, delicate brother into the foreground. In all small matters, he apparently allows him precedence and a free hand. But with every decisive situation, he presses the purposive will aside as a stupid phantom, and, with one bound, is in its place. How often this game has made us shake our heads. It is by no means always hypocrisy when a severe case of hysteria says: "I wish to become well." But it acts like hypocrisy because this will is so thin and superficial, because the outline of the mysterious double-self always spreads an uncertain light from behind and draws all the strength over to itself. When we have just begun to trust this purposive will, because it looks honestly at us, when we begin to persuade, to convince, and to educate, then, all at once there stands before us in its place, the second self which is blind and deaf and impulsively strong, and with one grimace upsets everything that we have built up by means of the purposive will. This zig-zag, this sudden snapping back of a hysteric, who for days and weeks at a time is quite sensible and willing, into impulsive resistance and an entirely new motor phase, we as therapeutists have painfully often to experience. And if the purposive will dominates at this second, then probably the hypobulic will rules without bounds in the next; and if the purposive will is mirrored in the face, then the hypobulic will holds sway over the legs. They run parallel to one another or relieve each other, but they are not found together. One lacks energy and the other a goal, until in the therapeutic sitting, during an elementary motor and affective turmoil, we finally force both of them together once more with strong stimuli.

Here again there is also no higher psychic adjustment, no adaptive psychological transition. But while we still pull and press and push, and, with sweat upon our brow, do not know how long we must continue in this way—suddenly there ensues a jerk, something almost physical, and all at once the patient wills, he wills and can will, and every muscle obeys his will. Out of two wills, there has become one, a unity of will which has strength and a goal. And the quiet cessation of vibration in the tremorous muscles is like the last humming of a heated fly-wheel, from which one has released the driving belt.

We must experience all of that over and over again in order to obtain the feeling that *here something quite elementary and massive has occurred in the psychophysical apparatus of the patient, a dynamic commutation* (Umschaltung) *between the principal elements of his sphere of expression.* Wherever the hypobulic will has dissociated from the purposive will and has spasmodically dovetailed with an easily excitable reflex apparatus, there arose a hysterical syndrome and wherever this false contact was loosened and the hypobulic will once more united with the purposive function into a complete united will, there was cured a case of hysteria.

So far we can establish with strict empiricism the state of affairs that we have daily and legitimately observed on the great series of war material and lifted out and characterized in its outlines, limiting ourselves to a renunciation of all theoretical aid constructions. The important thing about all this is *that one recognizes that the hypobulic will is a qualitatively characteristic type of will,* which under circumstances is capable of functioning as an independent component, and is arranged within the integral sphere of expression between the purposive will and the reflex apparatus, and which can displace itself from its bindings between both.

Now, is the hypobulic will a pathological innovation of hysteria, is it really something that is alone specific for hysteria? For a

decision of this question, we must take a somewhat broader horizon. The expression "*childish,*" at all times, placed itself upon the lips of physicians and observant laymen when they attempted to describe the volitional reaction of the hysterical. "Who, in the examination of a hysteric, has not hundreds of times cried out that he had a big child before him," said Janet.[2] In the war, with corresponding productions of muscular adult men, one sometimes felt tempted to say, "animalistic." Kehrer,[3] one of the most experienced therapeutists of war hysteria has compared the active therapeutic sitting with the "*breaking in*" of a horse. The comparison is a very sharp one; there is no better one. Before a cure, the hysterical person is like a horse before a hurdle. One does not persuade him; one also cannot simply force him, but one "gives him assistance." What one calls "assistance" as applied to the horse, is exactly the same as that which in hysteria we have designated as semi-physical, psychic elementary stimuli, which alone speak to his hypobulic will: The changing play of whip and little motor tricks, of a clear word of command and mysterious soft tones of reassurance. And also the other earmarks of hysterical behavior occurring under the compulsion of treatment are found once more while breaking in a horse: the incalculable antagonism of blind resistance and automatic obedience, the disproportion of this reaction to the stimulus, and the fixed punctiform narrowing of consciousness upon the actual scenic fragment. In short, *the way in which we influence the will of severe hysterias falls under the concept "breaking in."* And what is accomplished in the way of volitional results with children in the first years of life by means of painful stimuli, gestures, and acoustic admonitions is also a "breaking in" process, and only by degrees, when the purposive

[2] Janet, Der Geisteszustand der Hysterischen. F. Deuticke, Leipzig und Wien, 1894.

[3] Kehrer, Zur Frage der Behandlung der Kriegsneurosen. Zeitschr. f. d. ges. Neur. u. Psych., 36, 1, 1917.

will begins to develop over the hypobulic will, does this " breaking in," through sensory signals, lead over into volitional guidance by motives which we designate as training.

In the story[4] of his life, Strindberg describes hypobulic volitional phenomena in the child: "When a pleasure beckons (the boy), *e.g.,* an excursion to pick berries, he requests to be allowed to stay at home. He knew that it would be very lonesome at home. He wanted to go along so badly, but above all wishes to remain at home. *Another will stronger than his own, ordered him to remain at home.* The more one persuaded him to go, the firmer became the resistance. But if someone came and jokingly seized him by the collar and threw him upon the rack-wagon, he then obeyed and was glad that he had been freed from the unexplainable will." In this description, not only the hypobulic will, but even its reactionary, dissociative arrangement against the purposive will, engaged in development, becomes clear.

And, therefore, what in the hysteric we have looked upon as a sort of pathological foreign body, this demon and double of the purposive will, we in the higher animal series and in the little child generally find as the will, as the kind of wishing which for this stage of development is normal and more or less alone present. *The hypobulic type of will is the ontogenetic and phylogenetic lower stage of the purposive will.* And being a lower stage we just call it hypobulic.

The catatonic symptom complex contains the hypobulic type driven to its most extreme length. By that I naturally would not like to say that catatonic negativism is identical with the hysterical or the childish or the animalistic negativism. I only say that even the catatonic syndrome is no productive, new-creation of the disorder, schizophrenia; in the sense, perhaps, that a singularly formed tumor growth arises at some point on the body where there previously was nothing, and where nothing organic should

[4]August Strindberg, Der Sohn einer Magd. Georg Müller, München, 1912, S. 56.

be. Catatonia does not create the hypobulic symptom complex, but only fetches it out. Catatonia takes something that is an important normal developmental constituent of the psychophysical apparatus for expression in higher living beings, pulls it out of its normal relationship, isolates it, displaces it from its normal bindings and thereby allows it to function too powerfully and with inappropriate despotism. In so doing, catatonia, in its way, does something similar to that described for the forms of hysteria. And that such heterogeneous psychopathological types as a war neurosis and an endogenous catatonia should build themselves up on the same hypobulic radical, only shows that the hypobulic will not only represents an important transitional stage in the evolutionary history of higher living beings, that later disappeared and simply became replaced by the purposive will, it also shows that the hypobulic will, on the contrary, is a persistent organ which still remains preserved in more or less strong relief in the psychic life of adults.

And the hypobulic will does not merely exist as a rudimentary atavism, as a dead appendage. On the contrary, we perceive the *hypobulic will, even in healthy adults, as an essential and main constituent which, with the purposive function, enlarges into the integral will.* But here it is not dissociated as in hysteria and catatonia, not recognizable as a tangible, independent controlling part (Betriebsteil), but is conglomerated together with the purposive will to form a functional unity. Just those persons whom we designate as strong willed base this characteristic on their well preserved hypobulic will. A leading statesman or a commander-in-chief must at times have the faculty of tetanizing his will upon a goal which stimulates him, to be so firm and immovable that now he no longer looks to right or left; he must be so fixed on it that the influences of other motives are no longer felt. Wherever the will is tetanized, judgment fails; the field of vision becomes narrow, and the aims which are nearest at hand are also no longer able to take hold. In natures with a strong will, the

change from one objective to another also follows where the pressure of the situation compels it to, often not through gradual transitions smoothed off by motives, but through that jerky, sudden reversal of the entire machine with which we have become familiar in the hypobulic manifestations of hysteria.

On the contrary, wholly objective, equalized, purposive natures who at every moment are accessible to every moderate and reasonable consideration are often not strong willed; they are not leaders. They easily lose themselves, like Hamlet, in the carefully observed counterplay of their purposive motives, and hence constantly disturb any disposition to achievement. The strong hypobulics, on the other hand, when their will has once become tetanized—in their blind, tenacious aspirations—always run the danger of no longer being able to realize when their aim has become senseless. In accordance with the same mechanism, they can plunge state and populace unto misfortune, like a hysteric, perhaps, who fixed upon his compensation no longer realizes how the mastery over his own body and finally his social and moral existence swims away.

But those hypobulic conditions form a transition into what is abnormal where not very strong-willed natures in responsible situations, losing their objective guidance (Zwecksteurung), oscillate to and fro between mad stubbornness and hopeless unsteadiness. Or those *panic scenes,* where, through a single shock of an earthquake,[5] a hundred thousand inhabitants of a city, being suddenly removed to the animal stage of volition, impulsively push away, blindly obey, or become motionless like stone.

Consequently, in adults, the hypobulic will in itself is neither something good nor something bad, neither something rudimentary nor something pathological, but is an essential normal constituent of the will, and in itself is bound with insoluble functional unity to the purposive will and contained only implicitly

[5] E. Stierlin, Über die medizinischen Folgezustände der Katastrophe von Courrières. Karger, Berlin, 1909.

without independent contours in the integral will. The hypobulic is not dissolved, it is only bound—that is the essential point in the situation with adults. It is only possible in that way for the hypobulic will to stand immediately before us once more, after a severe, shocking experience, as an independent syndrome in its pure phylogenetic atavism; yes, for it to spring forth in hysteria and catatonia from the firm structure of the psychomotor sphere of expression (Ausdruckssphäre) as a second self adjacent to the purposive will, as an almost completely emancipated autonomic component. *In adults, therefore, the hypobulic will is a bound but independently dissociable constituent of the sphere of expression.* And it can just as well be dissociated by endogenous processes, as by a shocking experience.

At the present time, we cannot enter into a detailed comparison between the hypobulic volitional phenomena of the hysteric with those of the schizophrenic catatonic, and also the interesting question, in what psychological, evolutionary, and anatomical relation do these hypobulic syndromes stand to the striatum symptom complexes, *i.e.,* to those manifestations in volition and motility which occur in relation to injuries of the corpus striatum in the brain, is not yet ripe for judgment.

At all events we no longer see in such a detached way, here will, there reflex, here physical, there psychic, but we see the *entire centrifugal half of animalistic manifestations of life, in the form of the sphere of expression, running its hand through from top to bottom in closely joined together continuity, and, for an understanding of the whole matter, we see the hypobulic will as a decisive connecting link of the purposive will (perhaps also in relation with the catatonic and striatum syndromes) leading*[6] *down to the low reflex.* In the healthy adult, the individual members

[6] This is entirely a schematic representation. In reality, there does not exist a continuous chain, but a complicated system of primary connections (Hauptschaltung) (cerebral cortex, pyramidal pathway, spinal column) and secondary connections (*e.g.,* the basal ganglia).

of the chain work into each other to such an extent that it is impossible to see them separately, and pathological processes first allow us once more to recognize the evolutionary history of the structure.

It is important to recognize that whenever the higher component within the sphere of expression (Ausdruckssphäre) fails, the whole apparatus never stands still, but the next retrocessive component takes possession of the leadership according to its own, inherent, primitive laws. When the pyramidal tract has suffered injury, then early childhood reflexes (Babinski) once more begin to appear in the retrocessive spinal reflex arcs, and the entire lower motor apparatus arranges itself, in accordance with very simple mechanical laws of motion, into a separate, individual life. It then no longer recognizes complex, coördinated motor acts, but only the two simplest muscular functions: contraction (spasm) and the mechanical, rhythmical change between contraction and relaxation (clonus).

And what happens when the *purposive sphere* (Zwecksphäre) *in a person becomes insufficient through sudden mental shock or through chronic affective disharmony?* Then the hypobulic will takes possession of the leadership; then early childhood reaction-forms appear; then the psychomotor apparatus of expression becomes established upon the next lower arc of activity; with elementary stimuli, there follow elementary volitional reactions in accordance with very simple, schematic, psychomotor laws. The hypobulic will begins its separate existence: no longer in complex, motivated, co-arrangements, but only in accordance with the simplest primitive formulae—spasm of the will (Willenskrampf) on the one side, on the other side, an almost clonic, rhythmical antagonistic oscillation between spasm and relaxation, and between negativism and automatic obedience. And here above, like below in the separated spinal reflex arc, we have the same jerky, tenacious, incalculable temporal dynamic course and absence of relation between stimulus and reaction.

Where, now, has the unbridgeable gap between organic and functional nervous disorders been left? In our point of view, the counter tension of the resistive hysteric is nothing more than the younger brother of an organic, spinal, muscular spasm; he reiterates the play of an emancipated subaltern component that is literally transferred from the mode of function of an independent spinal reflex arc to a higher arc of activity belonging to the sphere of expression. Therein lies not an incidental parallel but an important fundamental, neurobiological law, which, long already known in the field of lower motility, only awaits application in the psychiatry of the neuroses. *If, within the psychomotor sphere of expression, a higher component becomes inefficient, then the next lower component becomes independently established in accordance with its own primitive laws.*[7]

For an understanding of the dynamics of hysterical manifestations, it is sufficient if we summarize the components belonging to the sphere of expression, in a somewhat more simplified manner, into *three main groups: the purposive component (Zweckinstanz), hypobulic, and reflex apparatus;* whereof each, considered in association with its afferent paths, represents an arc of activity (Wirkungsbogen) analogous to the spinal reflex arc.

The voluntary reinforcement of a reflex will follow in accordance with the same laws, whether the higher, rational or more the impulsive hypobulic incentives influence the reflex apparatus or the lower neuropsychic automatisms, only with this difference that the reflex apparatus with elementary directness is placed at the disposal of the hypobulically dissociated, impulsive will.

The following form of binding between the components of expression is frequent. It is so typical for innumerable cases of chronic hysteria in the late stages that we must consider it somewhat more closely. If a weakness of conduction arose in the *pyramidal tract* through incomplete alinement (Abschnurrung),

[7] Already clearly enunciated by Hughlings Jackson 40 years ago. Also see v. Monakow's diaschisis.—(Ed.)

we meet in the corresponding organ, *e.g.*, in leg motility, the following picture: We see that isolated, coördinated impulses for purposeful motion, which come from the higher brain centers, pass through more or less completely. There occur in part coördinated movements of gait and purpose, not in pure form, however, but mixed and colored with spastic and clonic elements. A spastic disturbance of gait corresponds to an interference between the coördinating impulses of the higher centers and the specific, spontaneous motility of the emancipated spinal reflex arc. But it gives still another picture. If such a spastic patient has rested for a certain length of time and now wishes to rise, his coördinating impulse, on the whole, often calls forth no coördinated movement, but only a pure spasm or clonus. In this case, therefore, the higher impulse no longer acts upon the emancipated spinal center as a complex, finely differentiated command to move, but on the whole merely as a stimulus, a primitive impulse which will be answered by the spinal reflex arc according to its own laws with the same, simple clonic and tonic motor phenomena—like a heavy blow against the tendo-achilles. We may, therefore, formulate the following:

Within the sphere of expression, wherever the higher component is partially paralyzed, the lower component answers impulses from the higher component either with manifestations of interference or purely in accordance with its own primitive laws.

In the field of hysteria, we find this law once more perfected in the sphere belonging to the higher arcs of activity in the relation between the hypobulic and the purposive function (Zweckfunktion). A war hysteric, whom I know through and through, recently came to me once more in order that I pass upon his condition. He holds his left leg stiff and, in so doing, intends to extort compensation. This purpose is plain and acts as the chief cause for the mobility of the left leg. But how does it act upon the leg? Not at all in the way we would expect it to and as we would actually perceive it in a purposeful, clever simulation in which

every muscular movement, every physical attitude, every step, every word, and every glance are sensibly put together, balanced, and condensed according to their influence upon the physician. But as soon as a marked purposive situation (Zwecksituation) is created in the examination room, as soon as the physician touches the left leg, there begins that same hollering, chattering, resistance, and panting, which we have already so often described. The whole individual, physically and psychically, contracts together convulsively upon a point within himself, goes into an attitude of defense, and allows all of his primitive defense mechanisms to come into play. He hissingly shows his spines, like some irritated little animal from whom one wishes to snatch away his prey. This scene has released an aim, but so soon as the wheels begin to hum, the distributing regulator fails. Hence, exactly as in the case of the spinal reflex arc: The purposive will now merely acts as an unspecific stimulus upon the lower hypobulic component and is further elaborated according to the latter's own primitive laws into a pure HR-syndrome, *i.e.,* into those directly intimate amalgamations of hypobulic volitional manifestations with reflex processes, as we so frequently observe in the symptom pictures of hysteria.

A purpose (Zweck) can stimulate hypobulic volition without dominating it.

Still more frequently than these pure pictures, we meet in the chronic hysterias that second mode which was studied on the spinal reflex arc, to wit, an interference between the mechanisms of expression belonging to the upper and lower components. The psychophysical conduct of such patients expires in a faded, muddled-up, contradictory interplay of purposive motives and hypobulic mechanisms. To some extent, it has an aim, a purpose, *e.g.,* in obtaining compensation, but then again will forget its part and with absurd tenacity will restrain itself or, leaping off capriciously, will oscillate between semi-reflex and well thought

out forms of expression; *this mixture of obstinacy, caprice, and striving toward a goal is the extraordinarily characteristic and well known picture of hysterical conditions which arise from an interference, on the part of impulses belonging to a semi-insufficient purposive apparatus, with spontaneous hypobulic movements.* Very indented, incalculable volitional curves thus come into existence. In order to extort compensation, a hysteric will lie in bed for years, and strives towards a goal, yet, in so doing, acts without a purpose. For the sake of a small compensation, one embitters for years one's pleasures in life, whose increase after all was the basis for one's aspirations. One can neither enjoy nor deny the instincts of life. And so the curve tosses to and fro between momentary hypobulic impulses and the most purposeful and intriguing diplomacy—to-day critically ill and in convulsions in order to vex her husband with devilish careful planning, to-morrow dancing frolicsomely at a ball, and for the next quarter of a year, for his punishment, a female patient may again drag herself with the assistance of a cane into a sanitarium.

One has often raised the question: are these hysterical persons weak willed? With this interrogation one will never come upon an answer. "That is weak will," says the physician, perhaps, to his case of abasia, when the patient does not wish to stand upon his legs. Weak will, yes, indeed, because if he would exert himself he would surely be able to get on his feet. But does there not cling to just such unwillingness a strength of will, a force so tenacious and cracked the like of which many a healthy, "strong willed" person has never attained in his life? In brief, therefore, *such hysterical persons are not weak willed, but weak of purpose.* Weakness of purpose is a psychic state of affairs which we meet in a great number of chronic hysterias. Only with a separation of the two volitional components do we understand this puzzling game, to wit, how a person without guidance, but not without a purpose, can squander the highest volitional force upon the picture of a weak and most pitiable existence.

Weakness of purpose is not weakness of will. Even strong willed natures become weak of purpose, when, as perhaps in a *panic,* they become thrown into situations to which they are no longer psychically equal. There are shocking experiences, *e.g.,* great earthquake catastrophes, where according to experience, the higher psychic components of even the healthiest persons fail, where the stimulation of the experience directly breaks through the insufficient purposive sphere (Zwecksphäre) and tetanizes the hypobulic sphere. "Losing one's head" as that condition is very aptly called where, between residuals of purposeful impulses, the lower atavistic volitional organs with their changing play of stupor and blind pushing away have throughout taken over the leadership.

The condition of weakness of purpose, therefore, arises simply from a lawful proportion between strength of stimulus and psychic anlage. The stronger the shock of the stimulus, the less it requires a weakness of the nervous apparatus to checkmate the purposive sphere (Zwecksphäre). We readily understand from this normal mode of reaction, *the innate affinity which the hysterical mechanisms clinically show to the acute fright and panic syndromes in particular.* Nothing has succeeded in demonstrating hysteria as a general phenomenon (Massenerscheinung) so admirably as the fright-producing, industrial accidents and the psychic traumas of war. According to our own investigations that is self-evident, because fright does two things: now it violently stimulates the entire reflex apparatus, and then again it acutely switches off (Ausschalten) the purposive sphere. Consequently, the hypobulic sphere, which at once becomes autonomous, can fasten itself with elementary directness to the reflex apparatus and, united with it, can bring forth a shaking syndrome, perhaps, according to the laws of voluntary reinforcement of a reflex. The purposive will, by degrees awakening once more from its state of lethargy, already meets with tolerably fixed HR-groups whose dissolution requires a certain amount of initiative which

the individual will not produce when, for example, in consequence of a compensation situation he is not interested in its dissolution. On the contrary, there then appears that previously described typical and persistent condition in which the once insufficient purposive sphere (Zwecksphäre) acts upon the hypobulic arc of activity merely as an unspecific stimulus and no longer as the ruling component. In this way, there arise those HR-syndromes which become more and more fixed and dissociated from the purposive apparatus, and which sometimes represent nothing more than petrifactions of a former acute fright syndrome.

Analogous to this purely acute mode of origin of hysteria, the chronic mode can be very easily explained, where, *in the presence of persistent, unbearable situations, the purposive functions by degrees are so long harassed,* until at last the hypobulic component jumps in vicariously. This form can be frequently observed in war hysteria and in the marital and family hysterias of women. But even then, quite commonly, the hysteria is finally released by a last, acute, affective shock; or, upon the soil of latent, chronic, insufficiency of purpose (Zweckinsuffizienz), it appears only episodically with external, irritative shocks in the form of the hysterical attack, which often represents a purely circumscribed HR-syndrome: impulsive, infantile volitional and affective discharge mechanisms which radiate directly out into the reflex sphere.

CHAPTER VI.

The Transformations of Experience.

The hysteric extrudes a protecting rampart of instinctive flight and defense reactions; he disguises himself, grows obdurate, and strengthens his reflexes; and, in so doing, succeeds in deceiving and frightening the oppressive and menacing world that surrounds him—making it tired and compliant. These extruded, instinctive tactics may also correspond to a *defense against an inner experience*. The intrapsychic state of affairs becomes cleverly adapted to the defense against an external experience. It lies in the nature of the hysterical psyche that, on the whole, it prefers to elude difficult experiences rather than to look them straight in the face. And in like manner and with more or less success it attempts to disguise itself inwardly from itself, to push aside disturbing ideas, to modify them into something that is endurable and pleasing, or at least, become rid of them for a time by thorough discharges (entladungen). And again, as in the hysterical processes of expression, this succeeds with partial completeness through the simplest normal psychic means, in part only incompletely at the cost of a splitting of the personality; in the latter case, there then appear, as an exact counterpart of the hypobulic splitting of the will, the hyponoic mechanisms of thought in the form of double consciousness, dreams, attacks, and twilight states.

Simple *repression,* a common normal psychological mechanism, is utilized with particular pleasure by the hysteric for the overcoming of experiences. He no longer cares to see the disturbing experience, and, therefore, it is pushed aside, and moves from the macula of consciousness into the remoter spheres of consciousness, the dark periphery of the mental field of vision. It is hard to establish whether, in this way, a real, solid forgetting of the disturbing content really occurs with permanent success. At all

events, we frequently see that the process of amnesia does not properly succeed; that the hysteric, on the contrary, behaving like a frightened horse, again and again is thrown into disquiet by the dark point at the periphery of his mental field of vision (Blickfeld).

What parts of the circumstances comprising the experience of the hysteric now fall into repression? About the same as those in normal psychic life. Clear, massive, matters of fact, as a rule, are not, or only in circumscribed exceptional conditions, repressed. The war hysteric generally has the horrors of war, which he has experienced, and his own aversion to them clearly before his eyes. The wife of a drunkard, being unhappily married, has become hysterical. As a rule, she is quite conscious of her marital conflicts and of the general connection of these with her nervous condition. The case is different if, from the beginning, the situation takes root from only the vague undercurrents of one's own emotional life. On account of a budding, coexistent inclination towards a married man, which is prohibited, an engaged girl can directly become hysterical without the mental conflict ever having clearly appeared before the forum of her consciousness. From the very beginning, therefore, she represses the dangerous inclination; her consciousness does not accept the enticing situation, but seeks to push it aside without having inwardly completed it. The girl, in a vague, impulsive manner, at once reacts with hysterical defense mechanisms while she perceives danger vaguely arising on the horizon of her consciousness. She does not exactly formulate the situation to herself in words, or think it over and look it in the eye.

More exact than the repression of the original state of affairs is a certain repression of the part which the hysteric himself has taken in their further elaboration, to wit, above all the purposeful participation of his own mental striving in the creation of the hysterical symptom picture. The " flight into sickness," according to customary morals, could easily expose the hysteric to reproaches

of cowardice and dishonesty not only before others, but, above all, before himself. Like every healthy person in the same position, he therefore seeks to forget, if possible, or to recollectively remelt the fact of his own collaboration in the hysterical picture, or from the very beginning, after the fashion of an impulsive act, does not see his way clear as far as motives are concerned. By what means he can accomplish this with increasing proficiency from the very beginning and with progressive impression of the process upon the mind, we have already investigated with exactitude in connection with the voluntary reinforcement of a reflex. As a result of the tendency to repression, there appears what we have designated as the "objectification" of the hysterical syndrome.

But one must admit that repression does not represent a necessary constituent of every hysterical symptom picture. Repression is not specific of hysteria, either in the sense that there is no repression with hysteria, or, that there is no hysteria without repression. We see in "unmasked" individuals, who later frankly admitted to us a conscious, intentional assumption of symptoms, that even these conscious productions, viewed from the standpoint of the inexorable mechanism of psychophysical causality, become elaborated through the same laws of habit-formation, impression upon the mind (einschleifung), reinforcement of a reflex, automatic emancipation, yes, of splitting of the personality; and finally, they can furnish exactly the same pictures as the other patients in whom we from the very beginning were inclined to assume a more impulsive, instinctive participation in the hysterical symptom picture.

In the war, a young peasant boy wandered for months without therapeutic success from one neurological station to another; he was very much pleased over it, was in excellent spirits, and remained in bed. Every attempt at therapeutic approach released veritable tornadoes of all imaginable hysterical explosions: shaking-tremor, abasia, convulsions, and twilight states; he re-

sistively wriggled on the floor like a worm—jerked, struck, and screamed. But if one allowed him to do as he liked, he was quiet and contented. No one knew how, for his own use, he had smuggled an accordion, which I heard him play one evening, into the dark room. To the notes of this instrument, he assured me: "No one can make me well! But as soon as I am allowed to go home, I will stand up and work." This man had, in severest degree, all the symptoms which one customarily designated as hysterical. He well knew and had evidently established the motive of his hysteria, and expressed it with cynical directness.

In talking about her hysterical disturbances, a peasant woman who reacted with twilight states to unhappy marital conditions, with less coarseness and yet with näive frankness, said: "Those who are to blame will now surely learn a lesson from it."

If the stimulation of the experience is overstrong or the personality, as a result of degeneration, is dissociable with abnormal ease, the deeper psychic layers, which we have already begun to study in hysterical volitional processes, are not always laid bare by simple repression, but through a splitting of the personality. These deeper layers, now working separately, in the field of ideational content furnish us with *hyponoic formations* belonging to an early ontogenetic functional type. We recognize these hyponoic mechanisms in mythology and the art of primitives; in the modern normal adult person, we can study them, above all in the dream, and, aside from hysteria, very frequently in the schizophrenias.[8]

Some of the important characteristics of hyponoic thought processes are that they are not held together by logical categories, by firm spatial and temporal arrangement, or by causal connection; but through the principle of emotional connection and emotional conformity—the so-called *katathymia*. Much more than in normal waking thought, in dreams and twilight states the ideas

[8] For further details, see my "Med. Psychologie," Leipzig, Thieme.

arrange themselves together katathymically under the influence of wishes and anxieties. Moreover, the highest apperceptive syntheses and the logical syntactic development of thought are no longer furnished; in place of abstract words and thought there appear sensory images; what was thought of during the day in words, at night passes before us in dreams, in a visible series of images. These images sometimes maintain a scenic arrangement, but, with deeper clouding of consciousness, they fall to pieces into fragments of pictures which apparently go on without rules or regulations and, under the influence of affects, again conglomerate into peculiar image groups, the *image agglutinations.* The faces of several persons, several objects of similar emotional value, in the dreams are seen as one, and are conglomerated into unity; this we call, with Freud, *condensation.* Or the affective accent wanders from the totality of an image group to a single part of the same, which is then alone in consciousness, and represents the whole group, like a flag stands for an entire body of troops; this is the process of *displacement.* Such displacements and condensations have a *symbolic character,* inasmuch as they represent, in the form of a sensory picture, thoughts and feelings which in the waking state would have been expressed in an abstract sentence.

The hyponoic elaborations of experience, by preference, appear in circumscribed exceptional conditions, insularly set off from the thoughts of the day, and with the same jerkiness and unadaptiveness of commutation (Umschaltung) which we have learned to know in the hypobulic apparatuses. If the hysterical attack is the prettiest example of a hypobulic discharge with "violent-motor-reactions", negativisms, and suggestive phenomena, then the corresponding hyponoic formations allow themselves to be particularly well studied in the hysterical twilight state.

The *twilight state* differentiates itself from normal sleep: firstly, through the more explosive tension of the emotions, and then the strong participation of motility, while the dream pictures are not only inwardly experienced, but are theatrically carried into

action. After all there is no fundamental difference between them. From the severe dreams with groaning, talking, and walking in one's sleep, there are all degrees of transitional stages up to the twilight state, which freely occurs in broad daylight.

The nocturnal dreams of the hysteric and his phantasies in the twilight state are often identical; one grows out of the other.

In these twilight states the conflict of the psyche with its experience now comes to a head; the conflict, which the higher personality could not overcome, continues subterraneously in the split-off deeper layers of the soul.

The simplest type of twilight state is the *periodic reviviscence of the events* that had released the hysterical reaction. A soldier in a twilight state pantomimically brings a gun to his shoulder, aims, shoots, and points in the distance, lunges with his bayonet, deals out blows with both hands; upon his face is mirrored a corresponding changeable and very much increased expression of affect; toward the end the play will also be accompanied by individual outcries. "Old friend! Just now he has gone around in back of the oak! My God! Now he jumps! Struck!" In the war this "imaginary trench warfare" (Wetzel) was one of the most frequent constituents of the acute fright psychoses, and sometimes became chronically fixed. In the military hospital at home others still had an urgent feeling that in the next moment a shell would come through the ceiling. The fright is also repeated in dreams. Survivors of an earthquake catastrophe, even a long time afterwards, with very little shaking believe that they can feel the shock of an earthquake. In the first place, perhaps, these are all simple irritation symptoms of the central nervous system which later, having a distinct tendency to intensify the affect, may be transformed into hysteria. In quite the same manner as these recollections of fright producing experiences, erotic scenes, domestic dissensions, etc., also become stereotypically repeated in the twilight state. It can hardly be decided, I presume, whether twilight states of this type are biologically adapta-

tive, *i.e.*, serve a necessary means for the extrusion of affect, or whether they only betray a weakness and defect of an over-irritated nervous system.

But the active conflict of the psyche with the experience becomes distinct in another group of twilight states, which do not represent the painful experience itself, but its positive image. This is the type of *overcompensatory wish-fulfillment.* Just those gaps which are left by the life of reality will be filled out by the twilight state in the form of pleasant wish-dreams; and the painful spot becomes covered up and buried. The first assumption, in regard to such wish-formations, is an energetic *repression* which often succeeds much better in the twilight state than in the waking state. The logical elaboration of the real surroundings is blocked. Sensory impressions, which do not allow themselves to be blocked off, become reinterpreted into something harmless or pleasant; yes, built together into a closed illusionary scene which withdraws the painful environment and portrays a better one in its place.

The following observation of Steinau-Steinrück[9] on an acute fright psychosis in a degenerative hysteric is quite apropos: "A shell of the highest caliber struck quite near Gumlich, who stood in a trench. Shortly afterwards, Sergeant H., who stood next to Gumlich, saw him going through the motions of playing a piano. To it, he sang songs. Between them he would always cry: 'Now I am going to my father, do you hear the music playing?' As Gumlich made an attempt to jump out of the trenches, he was held fast. Only with effort was it possible to control him and return him to the rear (report of the company commander)."

Shortly afterwards: "On Oct. 7, 1916, a soldier, Gumlich, was brought to me (Steinau-Steinrück) in one of the dugouts, in the region of the severely bombarded Pys. He had been asking every stretcher bearer where he could buy some potatoes, and, hence, was considered psychotic. He displayed an anxious,

[9] Steinau-Steinrück, Zur Kenntnis der Psychosen des Schützengrabens. Ztschr. f. d. ges. Neur. u. Ps., 52, 1919.

bewildered, facial expression; a furtive glance; was very pale, and wrung his hands. In the dugout, he first looked around searchingly, then resolutely stepped toward me with the question: 'Are you Gustave?' Then instantly, 'You are not Gustave. I wonder where he could be?' In a lively manner, but in a monotonous, whining tone of voice, he states that he and his younger brother were sent by his mother to get some potatoes; and that now Gustave had gotten lost on the street. What follows was taken down stenographically: 'Is there a display of fireworks here? And there are cables on the street, one sees nothing and continually falls down. We were supposed to have gotten potatoes, now Gustave has not come, he is surely listening to the music.'—Where is the music?—'Well, outside of course. They are making such a crash, a horrible crash! Gustave is certainly staying away a long time. If he would only come, so that we could get the potatoes. Otherwise father will scold. Father is hungry, we have no more bread-marks!' He continues to look searchingly around the dugout. I point to the blackboard on which the medical officer in charge of the first aid station nearest to the front had written, 'nervous shock,' and ask what that means. He promptly said: 'Why, that is the membership card of the coöperative society. I must get potatoes, etc. . . .'—What is your name? 'That is on the card.'—Are you from Leipzig? (He spoke a typical Leipzig dialect.) 'Yes.'—From these and further answers it may be concluded that he takes Pys for Leipzig, the village street for Petersstrasse, the shell holes for manholes, the shell fire for music and fireworks. Upon the sudden and impressive rejoinder, 'But we are at war,' he looks fixedly at me for several moments, his features suddenly brighten up, as though he had understood, and then replies: 'War, good heavens, war on Petersstrasse? On this street there is a business which is called Krieg (War).'—What sort of a coat have you got on? Promptly: 'Well, of course, that is my new, gray, summer suit.' But there are buttons on the sleeves? Highly

astonished, he looked at the buttons and said: 'Buttons, yes; I wonder how the buttons got there? I ought to get potatoes, etc.' The story of Gustave and the bread-marks is again repeated. Left to himself for a quarter of an hour, with twisted head and arm position, he stands stiffly against the wall in the middle of the lively bustle of the overcrowded shelter; he looks vacantly with wide open eyes at one spot, and thus gives a wholly stuporous picture. If spoken to, he again begins, in a monotonous way, to whine about the potatoes. He does not react to the laughter of the Holsteiners who are standing around him and are, at times, unable to suppress their amusement. He also pays no attention to the wounded."

"After a half hour, I ordered a stretcher bearer to take him to the main dressing station. Upon his return, the stretcher bearer informed me that while on the road, which was shell-torn, under fire, and difficult to travel, Gumlich acted more as a leader than one who was being led, and each time zealously pulled him (stretcher bearer) out of the shell holes into which he repeatedly fell. At the end of the journey he showed Gumlich a hospital wagon and told him that he would find Gustave in it. Visibly relieved, Gumlich ran to the wagon and immediately got on."

In this case the mental situation immediately becomes switched around when the shell strikes—no doubt, reflexly, momentarily, and in a jerky manner. In place of reality and causality, there are substituted wishes and memories, like in a dream. The music is substituted for gunfire, and the father in place of military authority. The drama of the whole twilight state is later evolved with ease and naturalness from both of these leit-motifs which are immediately put into action. A recent experience of youth is substituted for the dangerous situation of the present; this experience, which is associated to the present dangerous one, step by step translates it into something harmless. In the recent experience of youth, there was also an anxious distressing situation, disturbing noise, authoritative force which held the boy back

in the constraint of its oppression. A situation, therefore, which allows him to express adequately his anxious excitement, and still break off its tragic and perilous point, to transform it into a childish game. Isolated facts and rejoinders, which might tear away the comforting illusion, are always successfully warded off through rapidly improvised aid constructions. The little blackboard quite naturally transforms itself into the membership card of the coöperative society, the gray military coat into a new gray summer suit, and even the fateful word "War" (Krieg) obtains as harmless a meaning as the name of a man on Petersstrasse. And so repression works continually with more positive energy, partly blocking off and ignoring reality, partly giving it a new and clever interpretation, in order to preserve the happy hyponoic island of consciousness from disturbances.

In this twilight state the father distinctly has a double, ambivalent rôle. On the one hand he stands as a harmless disguise (Deckfigur)[10] in place of oppressive military authority ("otherwise father will scold"); on the other, as in the child, he is the last positive refuge which takes the anxiously fleeing person into his mighty protection (therefore, immediately after being frightened by the shell, the instinctively repeated cry: "Now I am going to my father").

As is well known, this "*regression*" into childhood in the form of puerilism represents one of the favorite tendencies of hysterical twilight states, and frequently not in the form of a limited scene, but in a general, foolishly exaggerated imitation of the psychic attitude of a little child. "The patient calls himself Johnny, speaks in infinitives or not at all, counts coins clumsily and incorrectly; at best he counts only the pieces but not the value; he draws childish figures, plays the whole day like a little child, lets himself be distracted by any triviality, looks for his mother——"

[10]A term devised by Freud.

(Bleuler).[11] Puerilism, aside from its purpose of producing external disguise, intrapsychically has a tendency to energetically repress the disagreeable environment of reality (*e.g.,* in prison) and to place a more wished-for situation in its place. The protectedness and irresponsibility of a child's mental attitude, in particular, is the factor which makes it desirable as an illusionary refuge to such persons who have lost their ability to size up and master their situation in life. The child is allowed to play, laugh, and leave to others the solution of difficult problems. This mask, therefore, is particularly favorable to the hysteric who strives to flee, upon byroads, from his struggle with life. Moreover, this childish attitude need not be created with productive freedom; but, like a fixed reflex, it can set into activity associative pathways from its own childhood. Here, as usual, hysteria develops preformed anlages.

Simple, caricatured "*pretending to be stupid*" (Sichdummstellen), as is exhibited in the Ganser conditions and also in many other hysterical twilight states, is only a psychological variant of puerilism. Here, also, externally as well as before oneself, the mental inability to solve the conflict-producing experience at hand is quite drastically elaborated, and then, by preference, droll childish fibs become utilized. During a hysterical twilight state a woman runs around in her laundry room, makes grotesque movements, holds her head and cries: "My head almost fell into the wash tub." As so frequently happens, the head is here used as a symbol of capacity for clear thought and decision. This woman is unhappily married to her second husband, and the conflict which arose over the stepchildren, brought from both sides, had just previous to the outbreak of the twilight state reached its climax. If at this moment, in quiet medical consultation, she had laid bare her mental condition, the fundamental tone of her confession probably would have been expressed as follows: "I am beginning

[11] Textbook of Psychiatry. A. A. Brill's translation, p. 545. The Macmillan Co., N. Y., 1924.

to lose my head on account of all these difficulties." But in that moment when she is impelled to give expression, in some way, to this tormenting emotional condition, the spark of experience (Erlebnisfunke) jumps over into the hyponoic form of expression; and what she could not speak out at the right time by means of expression associated with higher psychic life will now be brought to presentation in accordance with the functional type belonging to the deeper psychic layers. Instead of abstract, syntactical thought, there appears a picture symbol. The abstract sentence is taken literally and brought to concrete presentation in a dramatic scene. The "losing of one's head" is symbolized with droll distinctness by the falling of the head into the wash tub.

Now, we are wholly in the field of dream psychology which furnishes us with pretty examples of this literal translation of abstract thoughts into its original, figurative sense. A lawyer who, during the day, had intensively contemplated over the question whether the psychological mechanism of repression plays a rôle in criminals, at night, in a dream, saw several suspiciously dressed figures of fancy-men who with great effort were trying to push aside a furniture wagon; he had, thereby, represented in a figurative scene the work of repression in criminals. This wholly corresponds with the symbolism occurring in the above mentioned twilight state.

So soon as the splitting of consciousness in the twilight state becomes deeper, these figurative, regressive translations of abstract thought processes appear everywhere in the form of dream pictures or real hallucinations. The ideational content is no longer thought but seen and heard. A hysterical woman, living in dispute with her relatives, each time in her twilight state sees in person the angry red face of her brother before her just as he looked at her on the occasion of their last conversation. In the corridor she hears the voices of her brother and his wife say: "One will catch her. She shall never come in." When the physician opens the door she imagines that both their heads

appear. A young married woman, who envies her sister's dowry, in a twilight state actually sees how the new linens belonging to her sister, piled up on a high wagon which is drawn at a gallop by terribly lean horses, are taken away from the wedding and cast into the creek. At another time she sees how her husband, whom she does not love, is stabbed by a fellow who assaults him with a long knife. These are all quite obvious wish-fulfillments, presented in a dramatic form. Or a childless wife, in a twilight state, experiences how she forces her way into a burning house and there finds a pretty new-born child which she saves, fondles, and presses to her breast.

In all these examples the pictures are still to some extent scenically arranged. In other cases they are divisible, after the manner of a dream, into *katathymic agglutinations,* which then require, in order to be understood, a certain interpretive work or a subsequent consciousness of significance, on the part of the hysteric, which is often present. There appear *concealing figures* (Deckfiguren) which efface the strong, emotionally emphasized, and particularly painful parts of the twilight state producing experiences. An unloved woman sees herself at a funeral. Her husband is not present. She is sitting next to her brother-in-law, whom she really would have preferred to marry, and drinks beer with him. In the coffin lies a distant relative. In this twilight state we need only substitute the husband for the distant relative, and there thus results a transparent wish phantasy, the wish that she actually entertains being: "Would that my husband were dead, that I might marry his brother." This wish is scenically acted in the twilight state, yet in such a way that the irreverant shocking part (the man in the coffin) is retouched. In a similar manner one hastily strikes out an awkward word in a sentence without a further reconstruction of the remaining sentence.

On the other hand, we may have real condensations. Figures are read into a mural painting—cats that pursue birds. A face without a body appears over a box; a woman who wears a red

skirt inside out on her head, etc. In cases which become accessible to interpretation, we recognize the symbolic nature of such phantastic formations. And thus a hysterical woman[12] hallucinates a male figure with a double head and from whose abdomen grows out a ram. She afterwards explains this picture herself: "The animal is gray—a ram, an animal, a satyr—and represents the character of the person to which it belongs. It has two heads, a parson's and a layman's head." All of this represents her two lovers in youth—one of whom was a theologist; the ram, a common symbol for sexual appetite, and the two suitors are composed into a homogeneous figure. All three constituents of the picture express sexual appetite, or the patient's own erotic past, but, instead of in words, it is expressed in a conglomerated picture group.

If we observe these complicated hyponoic transformations of experience, the affective currents under which they spring into existence can be seen glimmering through plainly enough. Here, also, the supporting emotional attitude, like in the simplest twilight states, is once more a double one, namely, either a periodic compulsion to live over again the injurious affect of the experience, or its wish-conforming transformation into a weakened, harmless, or complementary comforting phantasy. In the twilight state there appear either the dissonance itself or its dissolution, either affect or complementary affect, either anxiety or anger over the hardness of life, which again and again rear up; or there occurs a copious, pleasant phantasy-gratification of wishes that life has not fulfilled. One woman, in a twilight state, again and again experiences fear over the angry face of her brother; the other, on the contrary, again and again experiences, in new variations, the pleasure of having a child, which is denied her in marriage. Or, finally, in the same twilight state, the fundamental affect and the complementary affect, explosive anger and enraptured hilarity can

[12] One of Bertschinger's cases. The illustration which accompanies it can be found in my "Med. Psychologie."

mix and discharge themselves in sharp contrasts. After being buried, following the explosion of a shell, a soldier suffered for months from serially accumulated twilight states wherein he again and again experienced the accident with wild shaking anxiety; then, in the next moment, having artistically thrown a red blanket around his shoulders as though it were a king's mantel, he exclaimed with great emphasis and sublime self-sufficiency: "I am the Shah of Persia!" One must, however, constantly keep in mind that these complicated twilight states, in addition to their subjective significance for the inner life of the hysteric, also serve a further purpose in the outer diplomacy of the individual, exactly like every simple limp or tremor. They are inclined, therefore—being not only attempts to square oneself inwardly with a conflict producing experience, but also attempts, through exhibition of this inner tragedy or comedy, to exert influence externally—to correct the constellation of the injurious experience upon byways; through exciting fear and sympathy, to put the surrounding world in a favorable mood toward the hysteric; to break its resistance; yes, to exercise an active mastery over it. Like all other instinctive dissimulations, they also serve the struggle for power; in the struggle for existence they are an effective means by which psychically weaker persons escape from the stronger oppressive ones, yes, triumph over them. Just like the "sham-death-reflex" can rescue a little animal from the teeth of its pursuers.

Now let us, with a few words, think of the *direct radiations* which the hyponoic elaboration of affect in the *apparatus for expression* causes in the psychomotor system (Psychomotilität). We have already seen that the ordinary twilight state differentiates itself from the dream in that it brings pantomime and the play of features into strong reverberation, yes, even takes place preponderantly in a pantomimic fashion. These twilight-like pantomimes have, in part, something dreamy and somnambulistically fatiguing about them; more frequently they are explosively enlivened, full of motor tension, and convulsively overirritated gestures. From

here, one then gets all transitions up to the real *hysterical attack*. From a motor standpoint, the hysterical attack varies from the higher psychic movements of expression to an elementary reflex-like discharge of stimuli; from affect pantomime to "affect epilepsy." The gestures of expression for anger, anxiety, enraptured hilarity, which are still mentally tangible (einfühlbar), stand at one end of the series, and, to be sure, already discharge themselves into a hypobulic pathway with muscular tensions, negativisms, suggestion phenomena, and onrushing reflex mechanisms. At the other end of the series, on the contrary, we predominantly find rhythmical spasm and tremor movements, explosive motor crises, to be sure, having sprung from affective tension and intermixed with interstratifications of higher movements of expression—both of their forms of expression, in turn, into the voluntarily reinforced, the caricatured, the theatrical, the calculated to produce a pantomimic effect upon the curious public. Also elements of motion, the expressive and the more elementary reflective type, can intercross in the hysterical attack in the most diverse combining ratios.

In the hysterical attack, wherever we find determinable expression, it again shows the same affective complementary coloring as in the twilight state. Either the spasmodic motor discharges themselves express the primary fright, anxiety, or anger affect of the obnoxious experience from which they arose and which, in the attack, appear to be lived over once more, or they mirror the complementary wish fulfillment in the gestures of a blissful enraptured ecstasy. Fright and sexuality are again the impulsive conditions which are most easily able to translate themselves into the forms of expression of the hysterical attack. It reproduces anxious resistance, trembling, and pushing away just as convincingly as the sexual wish-fulfillment of the erotic movements of tenderness—even to a point where a complex motor living through of the act of coitus apparently occurs.

The hyponoic elaboration of experience can radiate not only in

circumscribed exceptional states, but also in *persistent motor symptoms.* And so one gets hysterical disturbances of gait and posture which have a real, complete *symbolic character,* and whose symbolic significance may also become conscious to their bearers. For months, an unhappily married woman still has only one wish: "Away from this house, away from this marriage." Often she went to church merely to think over, while there, how she could run away. During the breaking out of a twilight state, one evening, she feels strange sensations of pressure in the forehead, dizziness, that she must lie down—with this the urgent feeling, " away." Something impels her, " always away," as though she were pursued by someone from behind. Her face becomes tingly, the arms heavy; she must always run " only away." " It always drove me away, because I always want to be away from home." At night she ran all over—mountain, valley, and water; at 4:00 o'clock in the morning she requested her nurse to hold her fast because she must always run and jump. Head, hands, and feet were quite lifeless; all at once she lay on the floor and heard the nurse say that she intends to make coffee for her. She was at the same time on her way and in the sick room. At the same time in valley, forests, and mountain, quickly in bed and then again in the forest.—What, in this twilight state, was only experienced in phastasy, often was also transposed into reality: there appeared circumscribed poriomanic attacks, in which she blindly ran away from home and then found herself, on awakening, in strange houses or in a distant village. Finally there developed a long lasting disturbance of gait and posture in which she walked, with forward bent body and hasty running steps which fell heavily forward, like someone who in excited haste wishes to depart; inwardly, this was accompanied by an urgent feeling: " Only away from here (Nur fort)!"

In this case one can very nicely see how first a vehement, emotionally emphasized persistent wish, " Only away from here," arises from an experience. During the unhappy marriage this

wish is the leitmotif and fundamental tone of the entire personality attitude. Only now, the leitmotif begins to transpose itself into a picture-like, hyponoic play of phantasy: nocturnal flight; running away; running and jumping through mountain, valley, and forest. After that, it begins to bring psychomotility into action, likewise hyponoically, in the twilight state: there break out poriomanic attacks with blind running away. And finally, it attains a fixed motor symptom formation: The gesture of fleeing and running away becomes fixed into an expressive gait and body posture which represents the leitmotif, "only away from here," in a sort of persistent, hyponoic pantomime.

Well marked motor symptom formations of this sort are not seen with much frequency. They disappear in the mass of customary motor pictures of hysteria which arise by way of habit-formation, as residuals of chance apparatuses, or through the voluntary reinforcement of a reflex. A trace of symbolism can still, of course, be contained therein. And so one finds astasia-abasia, simply lying down and no longer wanting to stand on one's feet, often in somewhat feeble, debilitated, and weak lived individuals. A girl, having insufficient physical and mental stimuli, grows old without pleasure and little recognition—a drudge in the household of her parents. She drags the burden for years with a distinct feeling of disdainful treatment, of hardship, and the emptiness of her life. The family is very poor. Under constant financial worries and the care of a difficult, demented grandmother, her spirit finally breaks to pieces. She goes to bed, puts on a pair of blue spectacles, and falls over if one wishes to place her upon her feet. Now, herein, there often lurks a certain symbolic expression, a translation of inner experience into the motor. The figurative pantomime, with the blue spectacles and the inability to stand on her legs, expresses, translated into an abstract sense: "I wish to see or hear nothing further; I will not move another limb; I will not take another step." It is the inner renunciation of her life up to now—pantomimically clothed, externally, in a motor picture.

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Foreign, $6.60

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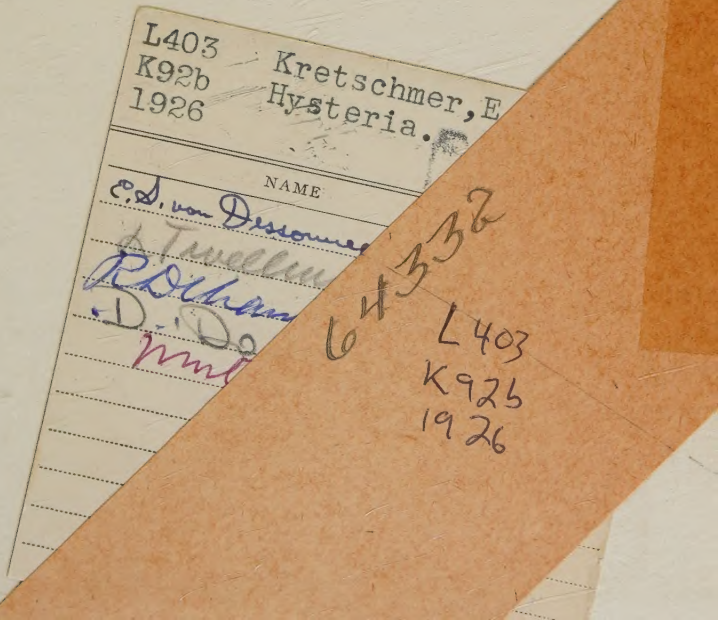
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